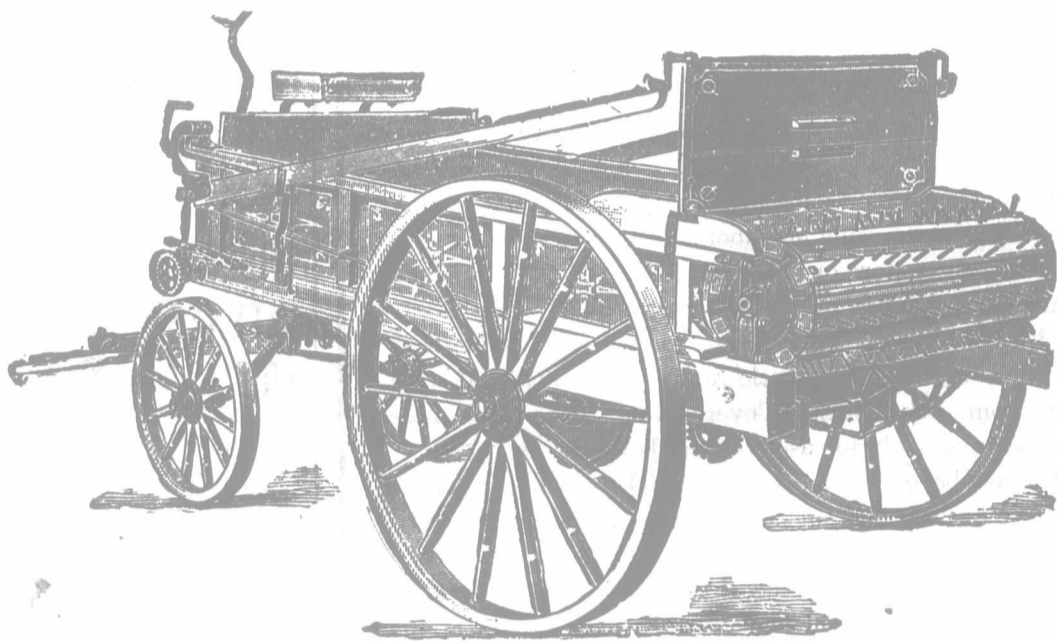


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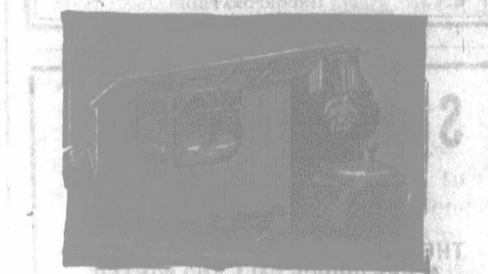
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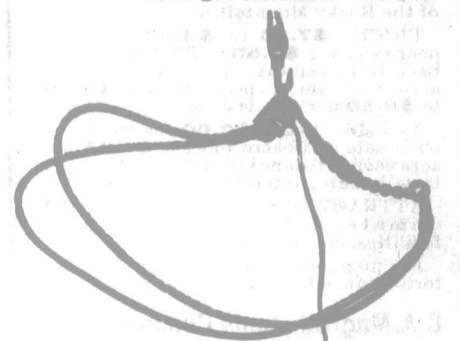
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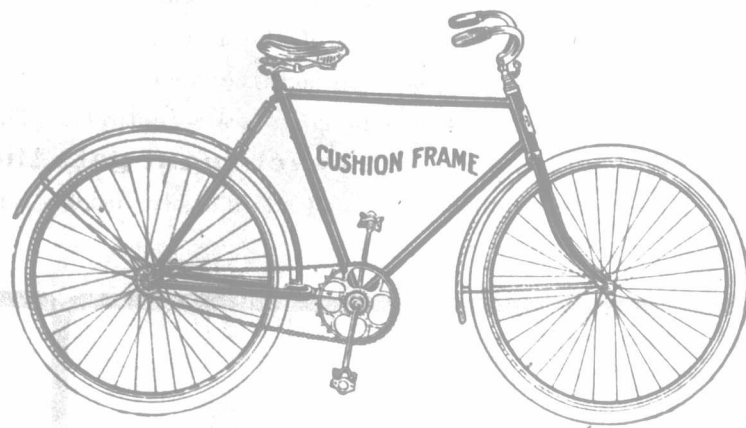
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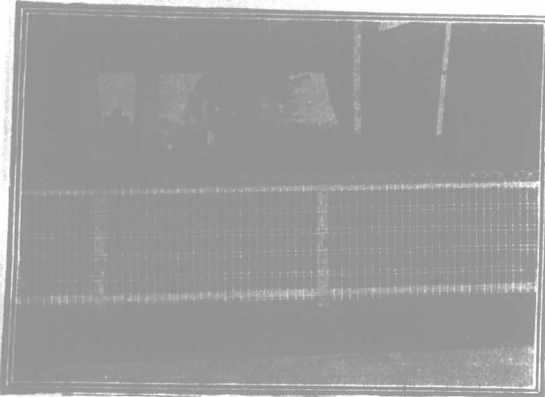
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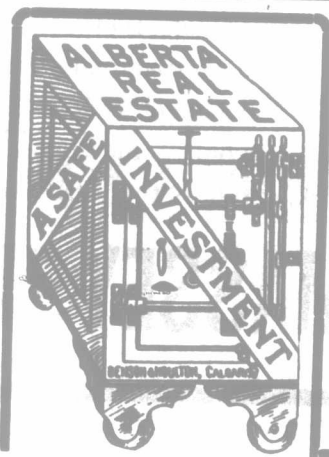
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VOL. XLI.

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LONDON, ONTARIO, MAY 3, 1906.

No. 710

EDITORIAL.

The Normal Training of the Rural Teacher.

The visit of the Ontario Educational Association, the other day, to the Agricultural College at Guelph, should do something towards focussing the attention of those who give direction and vitality to the Provincial school system, upon the institution which Dr. James Mills gave the best years of his life to promote, and which must ever be the greatest monument to his achievements. That institution, now under the enthusiastic guidance of President Creelman, has reached a status where it plays a large part, necessarily, in the educational scheme of the Province. It is not to be classed as a farmer's technical school only, or solely an institution where the ever-present problems of agriculture are grappled with and solved, for, let it be understood once and for all, that there is no agricultural millennium at hand. History but repeats itself, and every period will furnish its quota of agricultural difficulties. The O. A. C. was once not inaptly described, by the Hon. James Young, under the ideal of a great agricultural university, in order to express his conception of the extent and importance of its plans, privileges and purposes.

The new Education Act, recently introduced in the Ontario Legislature, makes provision for an Advisory Council, on which "all branches of education are to be represented." By all means, the Province should see to it that the President of the Agricultural College has a seat upon that Board, and a direct voice in the educational councils of Ontario.

The Act referred to also involves the abolition of the present city and county model schools, and the establishment, by September, 1907, of additional normal schools to keep up the supply of public-school teachers for the Province. The existing normal schools at Ottawa, Toronto and London turn out probably 250 teachers annually, and the School of Pedagogy at Hamilton something over 100 more. According to Provincial statistics, we have some 6,000 public rural school teachers in Ontario, and 3,500 in cities, towns and incorporated villages. The rolls of the latter will no doubt also include a good number of pupils from farm homes. Now, with these significant facts in mind, and without going into any analysis of the objects and methods of education, are we not justified in asking, in an agricultural Province like Ontario, suffering as it is, from want of agricultural population, that in the professional training of those 6,000 rural-school teachers, they should, by every possible and legitimate means, receive an equipment which will make their work touch real things and conditions, and set up and maintain a relation of sympathy with the people with whom they are to live, and whose children they are to train. The rural public school should develop an intelligent appreciation of the farm, outdoor life, and the things of nature. One of the most effective ways in which these things can be done is by promoting a closer touch of the teacher-training business with the great institution at Guelph, which now happily includes the Macdonald Institute. This Institute has already been an educational Mecca for large numbers of Canadian teachers, who have enjoyed and profited by its advantages. The Government can confer a real boon upon the farm life of Ontario and the teaching profession by boldly deciding that as large a share of the normal-school work of the Province should be done in a training school in close touch with the Agricultural College. We do not lack for precedents, if precedents be needed. Nova Scotia, ever to the

forefront in educational matters, has established an affiliation between the agricultural college and the normal school. The idea of their scheme was probably derived from France, where the system is in large development, and is credited with the remarkable improvement in the agricultural productivity of that country. But it is not that the normal teachers-in-training should take actual courses in agriculture, but rather from the indirect contact with the splendid institution and its student body of rising agriculturists, whose aims and efforts center about the farm and farm life, which, every June, is visited by 30,000 or 40,000 farm visitors, and a smaller host in December, with an intermittent contingent of visiting experts in agricultural education from all over the world. There is here, too, the opportunity to observe the ideal of rural education, as realized in the consolidated school alongside the College grounds. It is under such circumstances and conditions that teachers for rural schools should be privileged to get their pedagogical training. Unbound by tradition, and unhampered, let us hope, by any local contingencies, we trust the Ministers of Education and of Agriculture will be able to give effect to an educational consummation devoutly to be wished.

Grow More Corn.

Ensilage corn annually grows in favor with Ontario farmers. It is our heaviest yielding forage crop, and the silo enables us to preserve it with little waste, and in first-class condition for early or late winter feeding. A silo of corn would increase the stock-carrying capacity of most farms by from 15 per cent., upwards. To put it in another light, the man who erects a silo may keep as much stock as before, and yet sell enough hay each year to pay for the cost of building it. Indirectly, the growing of corn increases the fertility of the farm. Its ideal preparation is a winter-manured sod, and the summer cultivation given it puts the inverted sod in first-class condition for a grain crop to be reseeded to clover.

It is sometimes argued that corn must be hard on the land. This is hardly correct. Corn derives from the atmosphere the carbon and hydrogen which go to make up its fattening constituents, and, while it also draws upon the soil, the bulk of the elements of fertility which it obtains therefrom is returned to the land in the form of manure made by the silage-fed stock, thus increasing, rather than diminishing the available soil fertility. Corn is not a legume, and therefore not a nitrogen-gathering soil-restorer like clover and alfalfa, but it works well in a short rotation, making the conditions favorable for succeeding crops of clover, combined with which it also makes a number one balanced ration in feeding. Corn and clover should go together both on the farm and in the feed-lot. Wherever we find an old sod torn up and planted to corn for the silo, we expect better-fed stock, increased fertility, progress and profit.

While corn requires considerable labor, this fits in nicely with the remainder of the farm work. Planting comes after the rush of seeding, the summer cultivation keeps man and horses employed to good purpose during June, and harvesting is accomplished with despatch by means of corn binder and steam-driven cutting-box with blower attachment. No crop is more promptly and satisfactorily disposed of.

The corn belt is extending. Early varieties, careful preparation of seed-bed, and shallow summer cultivation, enable us to mature it in northern sections and on heavy soils formerly thought hopelessly unsuitable. In fall-plowed sod, corn will thrive on quite hard clay if given frequent summer tillage, to prevent the formation of a

crust. Freezing before being cut does silage corn no great harm, so long as a satisfactory degree of maturity has been attained. Maturity, however, is most important. Feeders emphasize it more every year. Better fifteen tons per acre of strong, heavily-eared, well-matured corn than eighteen or twenty tons of swill. At the same time, quantity should not be disregarded. In general, the late kinds, having a longer growing period, yield the best. One should, therefore, endeavor to plant a variety, the grain of which, ordinarily, at least, comes to a tough-dough stage before frost in his locality. Home-grown seed is to be preferred, if obtainable. Before planting, test the seed for germination. Directions have been given in our Farm Department, and readers are referred to them. If the germination is defective, get other seed. In samples which show a poor germinating percentage, the kernels which do sprout will almost certainly lack vigor, to a certain degree, while the worthless seeds will cause misses, and fallow spots are expensive in a crop which receives so much manure and work as corn.

The seed-bed should be mellow, warm and deep. This condition is best obtained by early and repeated tillage with spike harrow, disk, Acme and spring-tooth. A stroke of the harrow as soon as the ground becomes dry enough to pulverize, will prevent clod formation. An occasional stroke afterwards will conserve moisture and keep the ground in such condition that a deep, fine seed-bed can be prepared at any time. It is much easier to prevent the formation of clods than to reduce them after they are formed. If the land is to be spring-plowed, follow each day's plowing with roller and harrow, to compress the soil and form a dust mulch, thus conserving moisture and hastening the fermentation of manure and sod underneath.

Planting is done rather earlier, perhaps, than in the old days, but as corn is a heat-loving plant, and is stunted by a cold, wet spell, it is well, we believe, to wait until prospects of good corn weather. In Central and Southern Ontario this may be any time after May 15th.

How to sow—whether in hills or drills—is a matter on which opinion is divided. It is believed that, with an equal amount of seed in each case, hills will give a slightly larger percentage of ears. Planting in hills requires more time to get the crop in, but this is almost made up by the greater facility in harvesting, if hoe or sickle is used. Hill-planted corn may be cultivated both ways, weeds kept down better, and a more complete dust mulch may be maintained. Drilling the corn saves time in planting, enables one to sow a strip at a time, as may be prepared, and does not necessitate a lot of extra work in re-marking the field, in case a heavy rain comes before the field is all done. If the land is in first-class condition, and a man is prepared to attend well to the summer cultivation, planting in drills will prove satisfactory. On a weedy field plant in hills. In drilling, use an ordinary ten-hoe grain drill, and close all spouts but the third ones from each end. Regulate the thickness on a smooth roadway, so that a kernel is dropped every 9 or 10 inches. Much corn is still sown too thickly. Thin sowing means strong, rich stalks, and numerous large ears. Thick sowing means sappy growth and inferior silage. Better grow a little less stalks per acre, and save next winter's feed bill. Hills 42 inches apart should have, on an average, about three stalks, if intended for husking, and four or five if intended for the silo.

Perhaps the most important factor in successful corn culture is summer cultivation. Every judicious stroke with weeder, scuffer, or two-horse cultivator, means increased yield. The amount

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THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

PUBLISHED WEEKLY BY
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of cultivation that can be profitably given depends on the speed and cheapness with which it can be performed. This depends to quite an extent upon the length of the rows. Plant all the corn, therefore, in one field, if possible, and make the rows long.

Veterinarians by Grace of Parliament.

Following the recent University Bill, in the Ontario House, containing a provision to take over the Ontario Veterinary College as a Provincial Institution, extending and improving the course so as to raise the standard of the veterinary profession, it savors of irony that a bill should have been introduced into and put through the Private Bills Committee to admit a blacksmith to practice as a veterinary surgeon. The knight of the forge, it was urged, has been studying for twenty years, and, of course, any deficiencies in his knowledge of anatomy, pathology, chemistry and materia medica, will be compensated by the Special Act of the Legislature! It is possible the applicant is as well qualified to practice as some of the fledgling graduates, but the principle of admitting men by the edict of Parliament opens the way to all sorts of abuses, and, with the four or five score of college-trained men now being turned out every year, is altogether uncalled for. As on former occasions, when similar legislation was before the Committee, it was proposed to stop such a system at once, but, as usual, there was difference of opinion whether the measure in question should be passed before the prohibition came in force or not. The former idea carried, and the bill was reported. We would commend the wisdom of establishing at once a rule making it impossible for the Legislature to usurp the functions of recognized educational institutions, else they may as well, to quote Chairman Carscallen, "have a general Act passed to say that a man who has practiced with a qualified surgeon, but who has never taken a course of study, ipso facto, be authorized to practice as a veterinary surgeon." Let this bill be the last of that sort.

What Constitutes Being Informed.

The world to-day has little patience with the man who is not fairly well posted as to the latest events, discoveries and philosophy of his time. A pertinent question, therefore, is what constitutes being informed. Some years ago, in Manitoba, the writer overheard a conversation between a settler and the agent of an agricultural journal. The settler was an ignorant man, but the agent had struck him at a good time, for the week before there had been a murder in Winnipeg, and the whole Province was excited over it. The agent's arguments fell upon receptive ears. "Yes," said the man who was being canvassed, "it's a great thing to be posted. Last week I was away threshing, and I heard them all talking about the murder. When I came home on Sunday I brought along a copy of the Telegram, and spent pretty near all day Sunday reading up about it. I got the whole story, and when I went back to work next day I was able to speak the names of pretty near all the people mixed up in it."

The passion for sensational news led to the reign of yellow journalism in the United States a few years ago. The passion, having burnt itself out, and exhausted the resources of those who were pandering to it, is now subsiding. Sensation yields predominance to history-making events, and the people, tired of scanning headlines with extravagantly concocted stories underneath, are demanding that happenings be simply and concisely told. While Canadian newspapers have never yielded to this mania as have the American sheets,



"The Fighting Editor."

even the Canadian press will respond gladly to an enlightened public intelligence which will permit them to relegate scandal to the subordinate place it should occupy. The reading public mainly determines the character of our press. What is needed is more strong men who will influence the public taste by refusing to read scandal—men who are not ashamed to admit that they do not know the particulars of the latest murder, whose fund of conversational topics is not limited to the astounding items in the last two or three days' newspapers, but who think on the deeper problems of life, read magazines in preference to newspapers, and prefer the condensed news of the metropolitan weekly or semi-weekly to the diffuse and fragmentary scraps in the dailies. That the daily will continue to hold its place, there is no doubt, for business reasons will demand it, but for those farmers who have no particular necessity for following markets closely, we still incline to favor the weekly newspaper. What we need is more reflection, rather than more reading; and more reading of periodicals, rather than reading of so-called news.

There are some things that every man should be reasonably well posted on before he is entitled to be rated well-informed. He should be acquainted with modern developments in religion, particularly in his own church. He should know what is being done in educational circles and in politics. He should have a fair grasp of the latest discoveries in science and philosophy. Especially should he keep wide-awake and thoroughly abreast of the times in all matters relating to his own business. If a farmer, he should take

at least one first-class agricultural journal, and if he can find time to read two or three, it will be profitable employment. Such a course of reading, continued for years, broadens and deepens the intellect, whereas habitual scanning of the daily paper exclusively, especially the local daily, tends to superficiality. The best reading is none too good to nurture the intellect, and the more one cultivates a taste for it, the more pleasure and benefit he derives.

Fence-in the Wood-lot Now.

Now is the time to fence-in the wood-lot with a few posts and poles to keep the stock out. Do not neglect it another season. If you have never done any other thing to perpetuate your name and fame, do that. Thirty years hence, more than one old man whose span of life is about run, who tills no more fields, and for whom dollars have no charm, will point to a thrifty piece of woodland, and say, with pride, "I took 'The Farmer's Advocate's' advice and kept the stock out of that bush in 1906, and have never let them in since." And there will be more genuine pleasure for him in that sheltering block of woods than in ten times the money he might have wrung out of the land.

HORSES.

Watch the horse's shoulders; a little salt and water applied to the shoulders will help toughen them to the collar.

Clean the mud out of the feet, as it absorbs the hoof oil, and leaves the horn dry and brittle.

Suit the collar to the shape of the shoulder; a straight shoulder requires a special adjustment of the draft.

Horses on the Western ranges have not done so well as usual the past winter, owing to a lack of snow and water.

Even if it is only to get work horses, patronize the best stallion in the district; he will be the cheapest in the end.

The biggest horse of any type, says the Horse Show Monthly, is not necessarily the strongest, fastest or most enduring. The records of all kinds and degrees of horses, cattle (and other animals, from the genus homo down, or up), have justified this position, but look where you will, and you will find some big, overgrown brute "touted" as something ideal. The original Morgan horse, from whose loins sprang one of the grandest strains of equine families the world has ever known, was a small individual. Nearly all of our champion trotters, pacers and runners have been comparatively small horses, yet most of our breeders are delighted when they find they have an oversized colt or filly. The breeder should select individuals of worth and moderate size. Avoid the dwarfs and the giants alike.

Groom the Horses Outdoors.

At this season it is an excellent plan to take the horses outside in the evening and let them eat a few mouthfuls of grass while they are being cleaned. They will enjoy it immensely, and, in the rush of seeding, they earn a little compensation of this sort. Many, too, which are inclined to be crabbed when carried in the stable, will submit without a switch of the tail if allowed to eat grass meanwhile. Many a horse's temper is soured and warped by harsh grooming in a stuffy stable. Cleaning outside cannot be too highly commended, on the score of health. Cleaning in the stable raises the dirt which the skin glands have been laboring to throw off. Some of this, settling upon the feed, is reabsorbed into the system. It seems reasonable, when one looks at it, that once the perspiration has been got out of the system it should be kept out, and the best way to ensure this is to clean the horse where a breeze carries the dust away as fast as it is raised. This is not only better for the horse, but very much more healthful for the groom, especially if he be troubled with catarrh or bronchial weakness. For similar reasons, it is nice not to have dust in the stall. We can put up with stable occasion for it, and, particularly when the coat is being shed, it is most unwise.

Allowing for the bother of leading the horses out, and hopping, if need be, one can actually save time by grooming outside. Besides, grass feeds of some horsemen, the limited amount thus as a necessary laxative and blood purifier, vastly better than salts or dope, and assists greatly in

the shedding of the hair. If, the first few times, the horses walk around too much for convenience, tie them up to a post one at a time while the others eat.

The foregoing is not the fad of a humanitarian; it has been tried on spirited young horses, and the practical benefits were found to be surprising, although it is hard to say whether more satisfaction was derived from the saving of time in grooming, and the improved appearance and greater efficiency of the teams, or from the delight of the horses at being permitted to eat a few bites of nature's green grass in the cool evening air.

Clydesdales Wear the Best.

Editor "The Farmer's Advocate":

Some time ago I noticed an article from Wiggle & Co., extolling the Percheron horse, and trying to depreciate the Clydesdale. I am not going to try to answer him, as his own auction sale has fully demonstrated the value put on the breeds, as compared with the 43 Clydesdales sold by Mr. Davies at Toronto just previously. I will give you my own experience with the different breeds of draft horses. I was general manager for a tannery firm for 18 years, that employed from 100 to 200 pairs of horses every winter, and kept about 35 to 40 horses of their own. I always was a lover of a good draft horse, as some of the best salesmen will verify, and tried to buy the best horse I could find, looking for type more than breed; but after getting them and putting them into the work hauling supplies into the woods through all kinds of roads, just cut through the forest, for from 10 to 15 miles, I began to look at how they stood the work, and I found that the Clydesdale stood the mud and hard work the best, not being nearly so liable to scratches as the Percherons, the Clydes having a flat leg, while the Percherons would get all hacked up. So, to-day, after some of those horses have been through ten years, you can find only two gray horses in the outfit; the old Clydes were the ones we wanted to keep, as they stood the wear of years of hard work.

The Clydesdales are naturally the best walkers. The Percheron horse is a good round, fleshy horse, and if you do not press him too hard will look nice and keep fat, but when you give him the stress the lumber horse of our country gets in winter, he has not the bone and cord in his leg to stand it with the Clydes, and this has been the experience of many of our lumbermen. To-day, some of the best colts seen in our county are from imported Clydesdale horses, and we wish there were more of them, as we are sending thousands upon thousands of dollars out of the county to the west for horses every year. I have made quite a study of the kind of horses you can get the best results from, and, taking it all around, I say the Clydesdale for draft. In that belief, four years ago I went to Toronto and bought an imported 1750-pound Clydesdale stallion, and he has left the colts to show after him. One pair, full sisters, 2 and 3 years, respectively, could not be bought for \$500, and they are only grades. So, you see, it pays to get the right kind, no matter which breed. Let a man suit himself, but be sure to get the right type of draft horse.

D. H. TINGLEY & SON,
Aroostook Co., Maine.

Wants Mares from the Grass.

Editor "The Farmer's Advocate":

A question was recently asked about handling a stallion slow to serve. I bought an imported horse—a good one, costing me \$3,500—and he acted just as the one described. We had him one month before we discovered what was the matter. It is because the horse does not like the stable mares, wants the mares out on the grass, and clean, and that is where every one should keep his mares who wants to get them to breed. My horse never refuses mares when on grass. I can tell just as soon as they come near the horse whether they have been out or not. I have seen him turn around and go back in his stall, no matter how crazy in heat they were; but bring on a mare that had been out to grass and you cannot get a better horse to work. He covered 106 mares last season, over 70 of which proved in foal. Sometimes we fool him by trying a mare that has been on the grass to get him ready, and put him to the one we want to.

Ontario Co., Ont.

C. G.

A Welcome Visitor.

I appreciate "The Farmer's Advocate" very highly. It is a welcome and looked-for visitor every week.

Falmouth, N. S.

I received your premium knife a few days ago, and am much pleased with it. "The Farmer's Advocate" is a very welcome visitor at our home each week, and no person can read its columns without becoming a better farmer and a better man in many respects. Yours truly,

Oxford Co., Ont.

W. E. WEBBER.

No Advantage in Breeding Mares Early.

There is nothing to be gained, says a U. S. exchange, by breeding a mare too soon; that is, before the weather has become permanently warm. In Scotland and up in Canada there used to be a saying that it did not pay to mate a mare to a horse before the first Monday in May. Mares bred early, and before the cold weather has passed entirely, have a bad habit of coming back again to the horse, and it is fair to say that, of every four mares bred before the end of April, not less than three come back to be bred in May or June, if they get in foal at all that season. All the trouble, expense and annoyance of tagging back and forth to the horse would have been saved if the owners had waited until the warm weather came. When it comes to the stallion owner's point of view, the general aspect of the proposition is much the same. To put his horse to mares when he knows it will do no good in 75 per cent. of the matings, must of itself be a losing venture. It is the part of wisdom for the stallioner to induce the mare owner who would rush the season to go a little slower, and await a more auspicious moment. It is not the number of covers made, nor the number of mares served, that pays the bills. Every cover that the horse makes uselessly before or during the season is just so much money lost to his owner.

Prospects of the Hackney.

The trade for high-class harness horses, says a writer in the English Live-stock Journal, was never better. The difficulty is not how to sell, but how and where to find them. Country dealers who formerly would not look at a horse under the age of five years, are now buying three-year-olds gladly, and the London dealers are obliged, however reluctantly, to go abroad to help out their supply. In face of the great increase in the number of motor-cars, this strikes me as a wonderful and extraordinary fact. One would have thought that, adding the number of people who have given up horses for this reason, to the far greater number who have been literally frightened off the road by the dust-raising, hideous machines, the demand must have fallen off. It was argued a couple of years ago that nobody would be insane enough to drive a valuable, high-class animal on the road when at any corner a motor-machine, going at the rate of thirty or forty miles an hour, might, with a wild hoot, make cat's meat of him in a couple of seconds, or, at the best, turn horse, driver and trap into the ditch at the side. It was said, if any carriage horses were required, they would only be such as were about as valuable dead as alive—the sort, in fact, that the proud Spaniard rides into the ring to be disembowelled by the bull. Just the reverse, however, turns out to be the case, the slave is at a discount, and the swagger animal at a premium. People have found that the high-couraged horse is bolder in facing what he takes to be an awful devil on wheels than a more cowardly, underbred one, and that the motor car can take the place of the slave, but cannot take that of the high-stepping pair which proudly take their mistress for a drive in the park, or a round of afternoon duty calls.

Let this be as it may, the fact remains that a really high-stepping horse, whatever his height, whatever his color, whatever his conformation, was never as easy to sell, and never brought as high a price as at the present moment.

Then, as regards breeding stock, there is without doubt a growing demand for both Hackney stallions and Hackney mares for exportation. This year, for the first time in my experience, both foreign governments and foreign private buyers have come to our London Hackney Show with demands for stallions exceeding the supply. One government buyer told me he came for twelve, but could only find eight suitable stallions for his country, and he is only a sample of the others. They one and all have found out the value of the Hackney, and must have them. This must encourage the trade. The Germans, French, Dutch, Americans and Canadians may supply us with carriage geldings, but they must come to us for their sires, because no other breed than the Hackney, and no other country than ours, can give them the action and courage they require to cross with their slower, coarser and lower-couraged

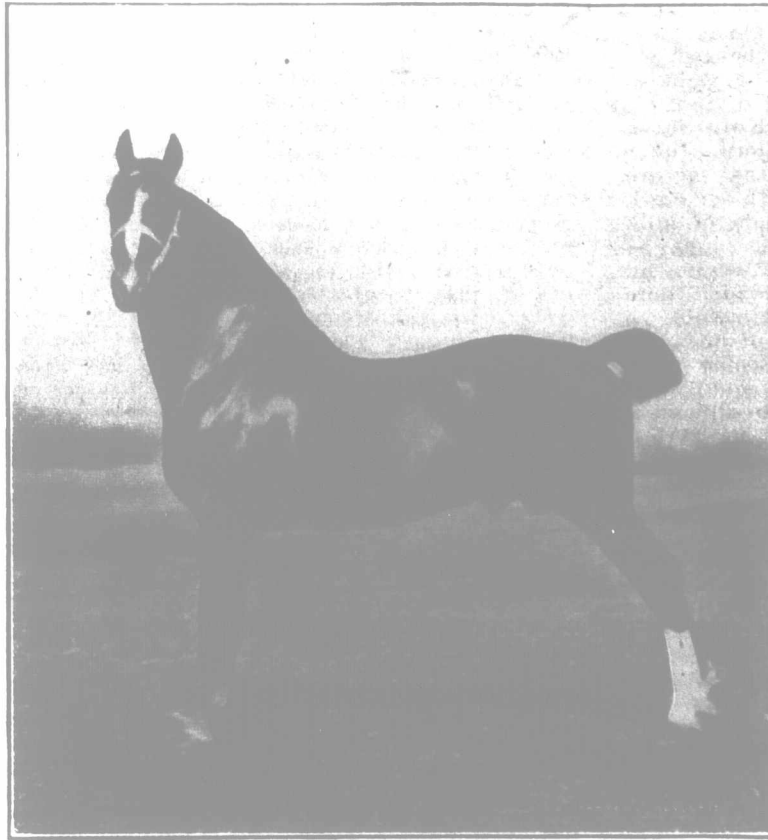
mares. The pity only is that foreign gold should tempt us to part with so many of our best mares, and that the country should lose such sires as Wildfire, and, in the later days, Cornfactor, for this reason. It is to be wished that all Hackney breeders were in the position of Sir Walter Gilbey, who so nobly saved for, unfortunately, such a short period, the services of Danegelt for the benefit of English breeders.

In my humble opinion, there is one saving clause in this foreign demand for our best stallions, and that is that our friends across the seas have not yet grasped the fact that the biggest stallions do not produce the biggest or best stock. I may, for reasons obvious to many people, be biased in this opinion, but at any rate, all your readers will agree that a good little stallion produces better stock than a "middling" big one.

To conclude, I think the future prospects for the Hackney were never brighter, and this, in spite of the motor craze, which many people thought was going to ruin it altogether.

Heredity of Horse Vices.

In a recent discussion on horse-breeding, a Scotch breeder of carriage horses, with large experience, said: "During a lengthy and varied experience in the breaking of young horses, one thing has been most forcibly brought home to me, viz., that there is nothing relating to horse-flesh which has a stronger tendency to prove hereditary than what may be termed inherent vice."



Active Forest King.

Hackney stallion, imported by Trumans' Pioneer Stud Farm, Bushnell, Illinois, and London, Canada; sire Forest King, champion heavy harness horse of America.

Mares, moreover, are apt to have colds and other feverish conditions along just at the break-up of winter, and there is absolutely no sense in letting a stallion serve mares under such circumstances.

Breeding Draft Horses.

A writer in the English Live-stock Journal says: "Shires are nothing if not 'cart' horses, in fact, they are the best and most available breed for draft purposes in the world, and it is to the interest of every farmer to see that the horse stock is improving year by year, for there is no possible doubt that the best are always the most salable, whether the trade is good or bad. The comparatively low price at which very useful breeding animals can be obtained ought to tempt outsiders to invest in one or two registered females, so as to be 'in the running.' The best Shire mares made figures round a thousand guineas. It must be a good stroke of business to sell out the common cart mares and replace them with those which may produce a colt or filly which will advertise its breeder all over this and other countries."

It is certain that there are none too many stallions of the massive, breed-improving stamp to be found, or geldings of the biggest and best type; therefore, the heavy-horse breeder who has improved his cart-horse stock so that he can supply either of these descriptions, will be able to effect sales."

Grass is the natural spring tonic for the horse. A few mouthfuls of it go a long way.

LIVE STOCK.

A View at the Agricultural College, Truro, Nova Scotia.

The accompanying view was taken in front of the judging pavilion at the Nova Scotia Agricultural College. Eighteen out of the twenty-three regularly enrolled, full-course students are in the group, and in front of them are to be found about as well a bred group of horses and cattle as could be gathered together on any farm in Canada. Beginning at the left, there is the Shorthorn herd bull, Royal Hero, a full brother to Hon. Thomas Greenway's Judge, and sired by the great sire of champions, Royal Sailor (imp.), formerly owned by the late W. B. Watt. Next to him comes the Hereford cow, Stella, that was first in her class at Amherst, and that owns as her sire Sir Horace, a sweepstakes bull at all the Maritime shows, and is a son of the champion Corrector, the great stock bull formerly owned and exhibited by T. F. B. Sotham. Stella's dam was a daughter of the champion, Mark Hanna. Then comes the four-year-old Hackney stallion, Cliffe Rosador (imp.), himself an extensive prizewinner at the English shows, and also at St. Louis, Chicago and Toronto. He owns for his sire the champion Rosador, and his dam is Cliffe Rose, also the dam of Cliffe Roberts, with whom Mr. Sorby won championship at Toronto. To his rear is Honfleur (imp.), a Thoroughbred stallion, sired by Galopin (winner of the Derby), and out of a dam by Hermit (winner of the Derby). The yearling Clydesdale filly just to the right of him is Baron's Lily (imp.), a daughter of Baron's Pride. The Holstein cow, Abby DeKol, is a daughter of Mr. Hallman's champion bull, Judge Akrum DeKol, and at the time when the picture was taken, had just completed a month's record, under ordinary feeding, of 1,710 pounds of milk testing 3.2 per cent. To the extreme right is Fox's Grey Friar, a three-year-old Jersey by Champion Flying Fox. Fox's Grey Friar's dam is Lovely's Grey Ruby, owned at Dreamworld, a cow that, when fresh, gave 62 pounds of milk per day. It was the intention to put some more high-class horses and cattle, that are equally as good, into the picture, but it was too difficult a task. However, these representations show that the boys at Truro certainly have every chance to learn the points of excellence of the various sorts of live stock.

Causes of Loss in Sheep-raising.

- The causes of loss in sheep-raising are summed up by W. S. Fraser as follows:
1. Low condition of flocks at mating time.
 2. Insufficient food and shelter during winter.
 3. Neglect during lambing time.
 4. Selling the best lambs and keeping the culls.
 5. Using inferior rams.
 6. Neglecting to destroy the ticks.
 7. Worrying by dogs, which may be largely avoided by having a couple of small cow-bells carried in each division of the flock.



Students and Stock at the Nova Scotia Agricultural College, Truro.

Beet Pulp in Beef Cattle Ration.

Editor "The Farmer's Advocate":

It has been the practice of the Ontario Sugar Company to feed twenty head of cattle or more each winter in the stables of its barn on the sugar-factory farm. Late last October twenty head of two-year-old steers, averaging a little better than 1,250 lbs., were purchased from farmers in the County of Huron and shipped to Berlin. For six or seven days after their arrival they were stabled and fed on sugar-beet pulp and hay only, in order to bring them to a condition similar to that when they were purchased off pasture. On November 9th, it was considered that they had recovered from the effects of shipment, and had reached their normal weight. In the afternoon, having had no feed at noon, they were driven a distance of about one mile and weighed. They were again, on March 21st, driven about the same distance and weighed. The increase was their total gain. All feed, except hay, was purchased, and the prices paid for the same, together with the estimated value of the hay they consumed, together with certain other freight and delivering expenses, make up the total cost of the feeding of these animals. The item of hay is an estimate based on the crop yielding 1 1/2 tons per acre, which was rather a high estimate for the crop. These figures may be interesting to a number of your readers, and, therefore, we take pleasure in sending you an itemized statement of the cost and profits of the feeding of these steers:

1905.	
Oct. 26	Purchasing price, 20 two-year-old steers (25,150 lbs.), at \$51 each.....\$1020 00
Nov. 1	Freight on cattle (Ripley to Berlin)..... 24 75
Nov. 1	Purchasing and delivering expenses..... 23 10
	Mixed grain (oats and barley), 8576 pounds..... 85 76
	Peas, 2120 pounds..... 27 56
	Corn, 5520 pounds..... 54 89
	Cost of chopping grain..... 6 10
	Pulp, 75.42 tons..... 37 71
	Molasses, 1206 pounds..... 12 06
	Oil cake, 360 pounds..... 6 12
1906.	
Mar. 21	Hay (estimated), 17 1/2 tons, at \$6..... 103 50
	Delivering expenses..... 3 10
Total cost (at market prices).....\$1404 65	

Selling price, 20 steers, 29040 lbs., at \$5.30 per cwt.....	\$1539 12
Purchasing price, 20 steers, 25150 lbs.	\$1020 00
Charges against stock, as per above statement.....	384 65
Net profit.....	\$ 134 47

Average daily gain per head during the 131 days' feeding, 1 1/2 pounds.

Note.—The item of manure is a valuable addition to the profits of fattening cattle, and much more than balances the cost of attendance.

A. E. SHUTTLEWORTH,
Waterloo Co., Ont. Agriculturist, Ontario Sugar Co.

Money in Hogs.

Editor "The Farmer's Advocate":

I have been much interested in the discussion on the hog question, lately going on in "The Farmer's Advocate." I believe there is as much money made out of hogs as out of anything else, considering the small amount invested, especially when in the dairy business (butter factory in winter and cheese factory in summer), one gets a lot of good feed for hogs at a small cost. I have had no experience in feeding clover, lucerne or rape, but will state briefly my experience in feeding in the pen.

I keep three pure-bred Yorkshire sows, and cross them with the Chester White or Berkshire. I find the Yorkshire sows are heavy milkers, and have larger litters than the Chesters, and the cross matures earlier than the pure-bred. (Can get them away at six months, weighing two hundred pounds or over. I have my sows farrow in March and September, and am sure of raising good litters, averaging about ten pigs to the sow. I let my sows run out the whole year round, on grass in summer, with whey for a drink, and around the strawstack in winter, feeding roots and a little oat chop, increasing the amount of chop as they get near farrowing time. After they farrow I give a thin slop of whey or skim milk and oat chop for the first two weeks, then barley and oats until the pigs are weaned. I feed the little pigs shorts until they are from 80 to 100 pounds in weight, as they will not eat enough coarse feed, such as barley and oats, when they are small. Then I finish them on two-thirds barley and one-third oats, soaked in skim milk or whey. Feeding in this way, pork can be made in winter for \$5.00 a hundred (valuing the skim milk at 15 cents a hundred pounds); and in the summer for \$4.50. I bought a bunch of hogs last fall; gave \$7.00 a hundred; they averaged nearly 100 pounds; sold them for \$5.75; they made me \$3.00 each. I bought all the feed except the whey, for which I do not count anything, as the manure will pay for it and the labor. But do not expect to make money out of hogs, rushing into them when they are a good price, and dropping out when they go down. Stay with the hog and he will give you good returns for your trouble.

W. H. SHORE,
Middlesex Co., Ont.

Prefers the Local Judge.

Editor "The Farmer's Advocate":

I notice an article in your issue of April 5th, under the heading, "Appointment of Judges at Fairs." Would say that the appointment of experts, as it has been done for a number of years past, has not given satisfaction. One reason is that they are strangers to the section, and, after the day of the fair they are not seen again, and have not to face the result of any wire-pulling that has been done on the day of the fair, whereas a local man has to do the right thing by all, or face the shame all the year around. There are as good judges to be found in any section of the country in Eastern Ontario as in Western Ontario, but I am willing to admit that a good man, who cannot be bought or influenced by liquor, as I have seen the case, will do the right thing to the best of his ability, no matter where he is. Often expert judges do not agree among themselves, yet each may be perfectly honest in his own opinion. To be a competent judge at fairs, a man must be proof against wire-pulling, which at fairs has got to be about as common as in politics. I am in favor of the local man, as long as he has no personal interest in the articles or animals judged. He can give the reasons for his decisions, and need not be a great orator to do so. A few well-chosen words from a man who knows his business is worth more than a long speech from the windy orator.

G. A. RYAN,
Prescott, Ont.

A Libel on the Hog.

People smile to hear it remarked that the hog is the cleanest animal on the farm. Yet, what other animals turned loose in a pen can be trained to drop their dung always in one corner? Steers will not do it, nor horses, nor sheep. Fortunately for their reputation, the horse and the steer are usually kept tied in stalls, and when stabled loose receive more or less regular attention. The occupant of the pigsty is never tied. He is fed on sloppy food, often given insufficient bedding, and so little attention in the way of pen-cleaning that he finally despairs of keeping any part of his quarters dry to sleep in. He loses all instinct of decency, and, by sheer neglect, is forced to wallow daily in his own mire. Then the poor hog is called filthy by owners who should apply the epithet to themselves. Because the natural diet of the beast consists in part, at least, of roots, and he therefore has a persistent desire to root in the earth, we have no right to call him dirty. Nothing is cleaner than sweet, fresh earth, and the hog prefers it every time to filthy material. It is the herdsman, not the hog, who habitually fails to distinguish between earth and dung. Many a man's sins are laid at the hog's door.

Not Health, but Protection.

Editor "The Farmer's Advocate":

I have been very much interested in Mr. Stratton's letter, in your issue of April 5th, and I agree with him in some of his statements: for instance, where he says it must be more economical to fatten our store cattle at home than to send them to England in a lean state, and send our coarse grains over there, also, to be used in fattening them; but there are a number of other statements he makes that I do not agree with, or, perhaps, that he forgets to make. He does not present the thing right, so far as we in Canada are concerned. For instance, under the existing law Canadian cattle are only allowed to land at one port, Glasgow, in Scotland, and three or four ports in England, London and Liverpool being by far the most important. At these ports, within ten days of arrival, the cattle have to be slaughtered. As a result of these conditions, the buyers are confined to a few butchers in the vicinity of the ports, who, in case of large arrivals, have only to "lie off" till near the end of the short period of grace to have the fixing of the price practically in their own hands.

Prior to 1892 Canadian cattle were allowed to land at any port in England or Scotland. Thence they were taken to markets throughout the country, and exposed for sale to all the butchers, who eagerly sought them. Under these conditions, the buyers would probably exceed 100 to 1 under the present method.

In 1892 pleuro-pneumonia was alleged to have been discovered in one or two Canadian cattle, and on this account they were excluded. Now, however, it has been abundantly proved, and is admitted on all hands, that this diagnosis was incorrect. Since that time over a million Canadian cattle have been slaughtered in Great Britain, and not a single trace of any contagious disease has been found. Could the same be said of the same number of home-bred cattle? We say, emphatically, no. We claim that there is no country in the world to-day that is so free from all kinds of cattle diseases as Canada; the climatic conditions of life are much better here than in Britain. There can be no doubt that if our cattle had access to the open markets throughout Great Britain they would bring from \$10 to \$15 a head more than they do at present. The exclusion of our cattle from the interior markets is a subterfuge for protection, pure and simple.

York Co., Ont.

WM. LINTON.

THE FARM.**The Wood Supply of the Canadian Manufacturer.**

[From a Paper read before the Canadian Forestry Association, by James Kerr Osborne, Vice-President and Assistant General Manager Massey-Harris Co., Limited.]

Twenty-five years ago wood entered far more largely into the manufacture of agricultural implements than at present. Then large supplies of various woods were available at moderate cost. Year by year steel has displaced wood. Beams, trusses, ties, angles, in infinitude of variety, have taken the place of numerous kinds of woods, until, to-day, in the modern agricultural implement, steel is the prevailing element. This is true, also, in respect to the building of houses, warehouses, office-buildings, factories, bridges, railway cars, etc.—in all of which steel has, to an enormous extent, superseded the use of wood. It is well this is the case, otherwise the drain upon the wood supply of the world would have become much more acute than it is.

Canada has been a favored nation in regard to her vast supplies of timber. In the older portions of the country the wood supply has been largely depleted, but the new lands now opening up to the north bid fair to furnish supplies of certain kinds available for many years to come. In the variety of woods, Canada has also been favored, producing hickory, white ash, black ash, rock and soft elms, white and red oaks, hard and soft maples, birch, hemlock, fir, spruce, and white and red pine. This article will deal with the so-called hard woods.

CANADIAN HICKORY, WHITE ASH, ROCK ELM AND OAK PRACTICALLY EXHAUSTED.

In earlier years, hickory, white ash, rock elm and oak were produced largely in Canada. These are the woods most highly prized by the manufacturer, on account of their great strength and adaptability for such a variety of purposes. The supply of these woods is practically exhausted in Canada, and so far as my knowledge extends, no attempt has ever been made to replant or to replenish the supplies of these valuable timbers.

Failing these more desirable varieties, the manufacturer has been obliged to have recourse to other kinds, so that of late years, hard and soft maple, black ash, soft elm, birch and basswood have come into larger commercial use. For many purposes oak is still the most desirable

kind of wood, but the supplies of this variety come almost exclusively from the southern and south-western States. Every bending factory in Canada is practically dependent upon the southern States for supplies of oak and hickory. The south-eastern States are the chief sources of supply, and the freight rates to points in Ontario vary in cost from \$10.00 to \$15.00 per thousand feet, b. m.

During late years cotton lands in the southern States have greatly increased in value, and I have been told that thousands of beautiful hickory trees there have been girdled so that they would die quickly, and thus enable the land to be more rapidly brought under cotton cultivation. Whether the forestry laws of the United States permit this or not, I cannot say, but it seems a wanton destruction of valuable timber.

DEMAND FOR POLE TIMBER.

The chief source of anxiety to the Canadian implement and vehicle manufacturer is his wood supply for poles or tongues; every binder, reaper, mower, drill, cultivator, wagon or sleigh made in Canada requires a pole. I estimate that from 200,000 to 250,000 poles are required annually for these machines made in Canada. The quantity used is constantly increasing; the supply is rapidly decreasing. Twenty-five years ago the counties of Essex, Kent, Lambton and Huron, in Ontario, supplied vast quantities of white ash, from which wagon and implement poles were made. The total coming from these counties now would not give a supply to one of our smallest factories. Canadian oak is also about all used up. Any oak poles used in Canada come from the United States. Practically all the poles or tongues used for agricultural implements, both in Canada and the United States, are made from Long-leaf Southern Pine. Not only is this material used for this purpose, but also in car-building, and for a variety of other purposes for which Canadian white or red pine is not suitable. The Long-leaf Yellow Pine, grown in the States of Georgia, Florida, Alabama, Mississippi and Louisiana, seems to be especially adapted for poles for agricultural implements. It is very strong and tough, being full of resin or pitch, and it grows large and free from knots. The freight on this, from the mills where it is produced to points in Canada where it is used, runs from \$12 to \$15 per 1,000 feet, b. m. During the past year, we have experimented, to some extent, with Canadian birch, and we are of the opinion that, if properly selected, it would be suitable for the purpose. The growth of large birch trees is confined to northern Ontario and Quebec, and, while moderate supplies of suitable timber might be obtained, it would not be possible to secure sufficient to meet the large demand for the purpose indicated.

The production in Canada of soft elm and basswood is still large, and these timbers come in greater or lesser quantities from all parts of Ontario. These varieties are used, not only by agricultural-implement manufacturers, but by piano and organ makers; besides, large quantities are used for piano keys, and for export trade, and immense quantities of the lower grades are used for packing cases. This is also true in regard to spruce and hemlock. Canadian hard maple is still in good supply, coming chiefly from northern Ontario, and is an excellent wood for many purposes.

The lumber consumption of the Massey-Harris Co. exceeds ten million feet annually, and, with the exception of pole stock, oak and whitewood, is principally drawn from Canadian sources. The value of their annual purchases is about \$260,000.00.

I offer the following suggestions, among many others that will doubtless come before you:

Encourage the planting of the more valuable varieties of timber which are gradually becoming extinct in Canada.

Foster the protection of standing timber that is still growing and increasing in value.

As far as possible, draw our timber supplies from lands where settlement is crowding clearing.

Where our own timber is growing and increasing in value, use the other fellow's, i. e., draw on outside supplies, and conserve your own.

Dimes for Minutes in Grading and Testing Seed Corn.

After the seed corn has been carefully selected as to the type of ear and character of kernel, and properly tested as to germinating power, says A. T. Wiancko, Agriculturist of the Purdue Experiment Station, it should be shelled and graded, with special attention to securing uniformity in size and shape of kernel, in order that the planter may be readily adjusted to uniformly drop the required number of kernels.

Do not neglect this grading and testing. Do it on the first rainy day. You will be paid for the work many times over when you harvest the crop. You can make dimes for minutes at this work. You cannot afford to have a poor or irregular stand.

Corn Growing in Ontario.

According to the Bureau of Industries, the area in Ontario annually devoted to the growing of husking corn amounts to 330,000 acres, while that set aside for the production of fodder or silage corn scarcely reaches 193,000 acres. These amounts, to some, may appear large, yet, considered mathematically, the combined areas represent but one-seventeenth of the entire acreage devoted to crop production in this Province. This fact is due to a variety of causes. The diversified conditions and the different systems of farming peculiar to this Province have gone far to encourage the growing of a great variety of crops. Then, again, a lack of proper appreciation of the food value of corn per acre, as compared with that of other crops, together with the failure to recognize the possibilities of evolving more profitable strains, has mitigated against the more extensive growing of corn in the Province.

Regarding the present yield per acre, we find that the average for the past thirteen years has been 70.2 bushels in the case of husking corn, while with fodder or silage corn, 11.4 tons of green corn per acre is given as the average for the same length of time. Heretofore, the majority of our corn-growers have been content to let well enough alone, and have made but little attempt to improve upon existing types. True, a great deal of valuable work, bearing on crop improvement, has been and is being done by scientific men at our Experiment Stations. Yet the great work of corn improvement must be conducted on the farms where the corn is intended to be grown. Corn bred for use in its own locality gives better results than does imported seed, since experience has shown that it is very difficult and expensive to obtain seed corn of first-class quality from others. In work such as this—practical, yet verging on the scientific—the greatest enemies are ignorance, apathy and prejudice. While "the man of science is the sworn interpreter of the high court of reason," yet of what avail is even plain fact if prejudice be uppermost. In the light of economic truths, therefore, should we not waive everything which tends to retard advancement, and grapple with this all-important problem? The work of corn improvement is so simple, so practical, yet withal so scientific that it cannot help but appeal to the intelligence of all progressive growers.

In Ontario, the kinds of corn grown for animal food may be divided into two great classes, viz., the Dents and the Flints. The former class is composed of varieties of the well-known Leaming type, which produce large, leafy plants, bearing great deep-kernelled ears. The latter class is composed of varieties of the Longfellow and Compton's Early type, which produce finer, more compact stalks, bearing long, large-cobbed, shallow-grained ears. Strains of this type have been developed by nature in the central and northern localities in order to facilitate early maturity.

The dent varieties are indigenous to southern latitudes, where they grow large and succulent, producing large ears, with deep kernels. Brought north, where the growing period is much shorter, and where early frosts prevail, they have not sufficient time to reach maturity, hence the lighter, earlier-maturing flints must be resorted to where grain production is sought for. Fortunately, however, these dent varieties will reach a sufficiently advanced stage of maturity for silage purposes over the greatest part of Ontario, especially when the seed is matured north of Lake Erie, and not in the more southern corn States, as is often the case. While it is generally recognized that a greater food value per acre may be realized from the dent varieties, still the difficulty of securing reliable seed of the right type has caused many to abandon these varieties and fall back upon the lighter-yielding but more reliable flints. Particularly is this the case in the more northern parts of the Province, where growers have to depend largely upon the seed-houses for their seed. These establishments, finding it difficult to get in Ontario seed of these varieties possessing good vitality, because of the present system of storing, get their supplies from across the line. Seed such as this, though it may all grow, cannot be expected to give best results when brought from a southern latitude into a district where the growing season is limited. While, therefore, the problem of securing seed from pure, early-maturing, heavy-yielding strains of corn which are better adapted to our conditions is one which must be met, still, in the last analysis, our first consideration should be directed towards the storing of our seed, in order that its vitality be maintained until planting time. Until this problem, already solved by private individuals, is more generally practiced, dealers will continue to draw their supplies of dent corn from these sources, which are more reliable, so far as vitality is concerned. In the light of this fact, together with the fact that southern-grown varieties are too tender, so to speak, even when grown for silage purposes further north, there is a great field open for a most valuable work in Ontario. This work must necessarily be educational in its nature, and must advance slowly and systematically. Starting from the first, we must encourage the production of a few pure-bred strains of our best

recognized varieties in our own Province. We must increase their yielding capacity and make them more suitable to the conditions under which they are to be grown. In the northern parts, we must aim to develop better flints for husking purposes, while in the more southern portions of the Province we must encourage the production of pure-bred, hardy, early-maturing dents, suitable for silage purposes further north. In this work the interest of both grower and buyer are inseparably linked.

Last, but not least, the whole system of storing must be exploited and put on a safe basis, so that all high-class seed may be carried over from harvest to seeding time without danger of its vitality being impaired.

CORN BREEDING.

The system of corn improvement, as adopted by the Canadian Seed-growers' Association, is one which should commend itself to all careful growers. The success which the members of this Association operating with corn have already achieved, bears ample testimony alike to the merits of the system and the intelligence of the operators. This system is, no doubt, known to the majority of the readers of "The Farmer's Advocate," but for the sake of those unfamiliar with it, we give the following outline, step by step:

First, decide upon the variety it is desired to improve. This may be one that has been grown in the locality for years, or may be a more recent importation which has already proven its superiority.

Secondly, locate a piece of land on a part of the farm isolated, at least one-quarter of a mile from fields producing corn of other varieties. This distance has been found necessary, on account of the tendency of corn to cross one variety with another, and, remember, our aim is to produce a pure-bred strain. This plot should consist of at least one-quarter of an acre of land, so arranged as to accommodate at least 20 rows, with 50 hills in a row. It should also be in a good state of cultivation, and composed of soil suitable for corn-growing.

Thirdly, mark out this finely-cultivated seed-bed into squares, at least 3 1/2 feet apart each way.

Fourthly, choose 20 ears, each of which excel in the various points looked for in a good ear of corn, and test each individual ear for vitality.

Fifthly, plant each individual row with corn from a separate ear. The reason for this is because of the great variation existing between the different ears as regards yield, and this system allows one to single out and select from the heavily-yielding rows.

Sixthly, as the tassels (male organs) appear, remove all of them from every alternate row, as well as those from all inferior scrub and barren stalks on the intervening rows. This is done to prevent inbreeding (fertilization of the silks of an ear by the pollen from the tassels of the same stalk) and to avoid the danger of the barren and scrub plants fertilizing the good ears, and thus predisposing them to perpetuate this evil.

And lastly, select for next year's breeding plot the superior ears from the best plants of the most productive detasseled rows. By this method both parents are controlled, the danger of getting in bad blood, so to speak, is avoided, and the tendency to produce strong, healthy, productive plants and ears is encouraged. When this plan is pursued, and the same type of ear selected year after year, a marked improvement in type and quality gradually adds to the value of the variety.

The inceptive stage of the work of corn improvement, as conducted by members of the Association, dates back to little more than one year, yet, even with so short a time, information of great value has been secured, which should prove interesting. The points most noticeable and of greatest significance, to date, are as follows:

First, the great difference in vitality between the different ears planted on the breeding plots. This was found to vary from 2.1 per cent. to practically a perfect germination.

Secondly.—The great variation in the vigor of growth of the plants produced from different ears.

Thirdly.—The variation in the per cent. of barren stalks between the different varieties and strains. This was found to vary from a perfect freedom from barrenness to 34.19 per cent. The dent and the sweet varieties had a much higher per cent. of barren stalks than did the flints.

Fourthly.—The difference between the different rows in the same plot, as regards their tendency to produce nubbins (small, inferior ears).

Fifthly.—The difference in the productive capacity of the different rows in the same plot.

Sixthly.—The variation existing between strains of the same variety. This was found to be almost if not quite equal to the difference existing between different varieties, and is no doubt due to the various conditions under which these strains have been grown, together with the amount of care that has been exercised in choosing the seed ears. This being the case, any system requiring that greater care be given the selection and preserving of the seed will surely

make for the general improvement of the resulting crops.

The objective evidences of the utility of this system as a means of developing and maintaining a high standard in crop production are sufficiently apparent to require no further comment. It is to be hoped, however, that the germ of improvement may infect and spread, so that ere long the growers generally will realize that they themselves must grapple with this all-important question.

L. H. NEWMAN,
Sec. C. S.-G. Association.

[Note.—Those who desire to take up the work of corn-breeding for themselves, under the guidance of the Association, can get instructions without cost by writing the Secretary Canadian Seed-growers' Association, Department of Agriculture, Ottawa.]

White-pine Forestry as an Investment.

In a bulletin by the Vermont Agricultural Experiment Station are the following calculations of the profits of white-pine reforestry on waste pasture lands:

The original value of the land is placed at \$4.00 an acre; taxes are computed at 2% of the original value, and computed interest at 4% on the investment.

The allowance for taxes is really not necessary, as the Legislature of the State has passed an Act exempting such planted lands from taxation for a period of ten years. In the calculations it is estimated that the seedlings will be grown in a homemade nursery bed, at \$2.00 per thousand, and set 6x6 feet. The estimate supposes that the crop is cut clean at the end of forty years. The trees should then average eight to twelve inches in diameter, and yield 140 cords per acre. At present such would sell at \$3 to \$5 per cord on the stump for box boards. One may safely assume that this price will, as a matter of fact, advance during the next forty years. It is also probable that the profit from the crop would be greater, providing only one-half the trees are cut at forty years, the balance being left for later harvesting. Bearing these conditions in mind, the following would seem to be a safe guide:

Initial outlay per acre.	Amounting at end of 40 years, compound interest, est. at 4%.
Value of land	\$ 4 00
Cost of seedlings, grown in homemade nursery.....	2 42
Cost of planting same (at \$2 per thousand)	2 42
Taxes (no exemption deducted).....	3 20
Totals	\$12 04
	\$50 99

Returns.—For this investment of \$50.99 per acre, the owner should have at the end of forty years, as already explained, forty cords of timber, worth at present prices on the stump \$3 to \$5 per cord; and, probably, prices will be considerably higher forty years hence.

Making all allowances, the conclusion seems justified that few more profitable long-time investments are open to the Vermont public to-day than the planting of white pine on the low-priced lands which abound in the State. And the man who does it may have the further expectation that such an investment will not only enrich his heirs far more than any form of life insurance, but will, in addition, contribute to the prosperity and attractiveness of the entire community.

Advance in the Price of Lumber.

Editor "The Farmer's Advocate":

We have noted the stand "The Farmer's Advocate" has taken in regard to the preservation of Canada's forests, and agree with you that such action has been taken none too soon. There is no better way to get next the consumer (who, originally, as a rule, is the farmer) than by talking to him through his weekly paper. Lumber does not enter very extensively into the construction of modern farm machinery. As time goes on we find there is less and less used, and we are not, therefore, in a very good position to speak with authority regarding the general supply and demand of different kinds and grades of lumber. To begin with, we might say that we never had very much difficulty in procuring sufficient maple, basswood and different grades of elm in Eastern Ontario (say from Sharbot Lake, east) to supply our requirements each season. The pine we use is all imported from the States, the freight and duty making it very expensive when laid down at Smith's Falls. All our poles, etc., are manufactured out of this wood.

Prices, as compared with those of 20 or 30 years ago, have, we should say, advanced on an average of from 25 to 40 per cent. Some lines, such as good maple, have not increased nearly so much as has basswood, for instance.

But on the whole, we would state that we find, for our business, we do not have a great deal of difficulty in obtaining in Canada a sufficient quantity of lumber of all kinds, with the single exception of pine.

THE FROST & WOOD Co., Ltd.

A Theory of Spontaneous Origin of Plants.

Editor "The Farmer's Advocate":

Will soil, when in certain condition, sometimes produce plants by itself, without there first being a seed or root from which to grow? This is a question for our scientific agriculturists to answer. If the answer is "no," then there are certain things which need explanation, for several facts have suggested the probability of the theory being correct. Here are a few of them:

It is well known that, in certain sections, where fields are allowed to lie uncultivated for a short time they rapidly turn to a heavy blue-grass sod. It may be argued that the seeds or roots of the blue grass were in the soil, ready to grow at the first opportunity. Let this be granted. However, another fact comes up: During the past few years we have had wet summers. In this time the old blue-grass pastures have become thick with small white clover. Have the seeds or roots of this plant been lying dormant all these years?

It is related that, after the burning of Moscow in 1812, a certain variety of tree sprang up in great profusion, so that if the Russians had not returned the city would soon have been a wilderness. Were the seeds in the ground all those years, or were they carried there by the French?

It is well known that clay land, trampled upon when wet, as it is on roadsides, soon becomes overrun with sweet clover. Whence did it come?

Here is another case. There is a small patch of red, wet-looking ground, and on it there is a kind of grass growing which grows nowhere else nearby. Over a mile away there is another patch of the same kind of ground, and the same kind of grass grows on it. Although blue grass grows all around it, it does not smother out these small spots.

I once read an article stating that in certain districts where hardwood timber was cut a new growth of soft woods would spring up, and vice versa. If this is a fact, what is the reason?

Several other instances might be given; and, although people generally regard this idea as nonsensical, they generally end by relating some instance which came under their notice which helps to prove the theory. It seems probable that this is the solution of the long-debated question as to whether or not wheat will turn to chess. Is this theory correct, or is it false?

A. W. MARSHALL.

[Note.—That plants will originate spontaneously, is beyond the belief of a scientifically-trained mind. The puzzling instances cited, and myriads of others, are all explainable when one takes cognizance of all the facts that might account for the phenomena. Nature's provisions for clothing the earth with vegetation are inconceivable in their variety and astonishing in their effectiveness. Usually every foot of soil is teeming with seeds, while such agencies as birds, wind, water and animals are continually disseminating others. Some, such as wild mustard, will lie in the ground a long time awaiting opportunity to grow. When conditions become favorable, they flourish and usurp the ground. As for the particular cases our correspondent cites, if he has noticed carefully, he will probably remember that, with the blue-grass pasture, a certain amount of white clover has grown each year, enough to seed the field pretty generally, or the stock may have carried the seed to the field in manure. There is no doubt, also, that clover seed will lie dormant for a considerable time in the ground, and we have seen a good crop of hay cut from a field of alsike seeded on oats, the oat stubble being plowed down and the seeds turned up a year after by another plowing. Such cases do not necessarily explain our correspondent's data, but they are suggestive. Regarding the sweet clover, it is of comparatively recent years that this has become spread over Ontario. It seemed to start along the trunk lines of the railroads, and spread thence along the roadsides, the seed carried by mud-laden wheels, horses' and cattle's hoofs, men's boots, running water, and who knows how many other means. As for the spot of soil that grows a peculiar kind of grass, the case is parallel to that of fields where lucerne is sown in a pasture mixture, and hillsides, for which it is peculiarly suited. As regards the growth of soft woods after hard, this cannot be said to be a rule. The second growth depends on such factors as parent seed trees and condition of soil. Old pine stands have grown up with young pine, owing to the few old seed trees of pine which escaped the fire.

There can be no error without a cause, though the cause may be difficult to discern, and no plant starts without a seed, root, cutting, or some other means of propagation, though its origin and means of transportation may baffle the most fertile imagination.

Origin of

The History of Fife Wheat.

They wore no coat of armor, the boys in twilight days—
They sang no classic music, but the old "Come all ye"
lays;

For armed with axe and handspike, each giant tree
their foe.

They rallied to the battle-cry of "Gee!" "G'lang!"
and "Whoa!"

And so they smote the forest down, and rolled the logs
in heaps,

And brought our country to the front in mighty strides
and leaps;

And left upon the altar of each home wherein you go,
Some fragrance of the flowers that bloom through
"Gee!" "G'lang!" and "Whoa!"

—Dr. O'Hagan.

Following upon the agitation to commemorate
the work of Prof. Bell, of telephone fame, by a
suitable memorial in the City of Brantford, Ont.,
comes another asking for a memorial to David
Fife, the Peterborough, Ont., farmer whose name
has been perpetuated in that of the famous
"Fife" wheat—the cereal that has made Western
Canada famous.

Just as the movement looking to the Bell
monument aroused interest as to "how" the in-
vention was accomplished, so in this case people
are asking just "how" Fife wheat, that wheat
which, more than any other, overflows the ele-
vators and streams out in a golden avalanche
over the great railways of the West, originated;
and the following facts, compiled from informa-
tion kindly supplied us by a niece of the late Mr.
Fife, will be read with much interest, especially
by those to whom, as to Dr. O'Hagan, the poet
of the pioneer, the good old days of corduroy and
logging-bees still bear the flavor of romance, or
are invested with the halo of memory.

Considerably over half a century ago, Mr.
David Fife came from Glasgow to Canada, and
settled on the farm in Otonabee Township, Peter-
borough County, which is still occupied by his
son, Sylvester Fife. Like other pioneers, he set
out valiantly to "smite the forest down, and
roll the logs in heaps," and, with others, found
that, however many the compensations afforded,
living in a new country is not all sunshine. (One
of the worst annoyances was the continual rust-
ing of the wheat, of which, in the small areas
possible to forest clearings, a good crop was nec-
essary. While this trouble was at its worst, Mr.
Wm. Struthers arrived from Scotland, and, during
his stay at the Fife homestead, heard much of
the fatal "rust." On his return to Scotland,
when looking on, one day, at the unloading of
wheat from a Russian vessel at the Glasgow
dock, he thought of his friend in Canada, and put
into his cap a couple of handfuls of this wheat,
which he afterward gave to Mr. Fife.

In the Fife garden there was, in the fashion of
those early times, a great pile of logs. These
were burned and the ground prepared, and, in the
plot so provided, Mrs. Fife carefully planted the
wheat, raking it in with a garden rake. It grew,
but all was rusted badly except five heads from
one root, probably a "freak" in the plant
world, unlike any wheat that had ever been.

The observant Fifes noticed these five heads,
and great was the consternation when, one day,
the oxen were found, not only in the wheat plot,
but "at" the very bunch of unrusted heads.
Three of the latter were, however, rescued, and
during the following winter occupied a place of
honor hanging to one of the kitchen beams. In
the spring Mr. Fife carefully rubbed out the
grains on a plate, and these were again planted.
In the little crop so gained, non-rusting prop-
erties were again in evidence, and now, indeed,
the Russian wheat promised to be a goose with golden
eggs. Year after year the best kernels were
picked out by the farmer and his family in the
big kitchen, and in time Mr. Fife had enough to
sow a small field.

By this time the fame of the discovery had
spread abroad through Otonabee Township, and
one by one the farmers applied to Mr. Fife for
samples. With characteristic generosity he turned
one away empty-handed, giving to some, and
selling to others at the same rate as for ordinary
wheat. Before long the rust-proof wheat was
growing everywhere, and was found to flourish
well, except on sandy land.

Then, as the county became older, and there
was less new land to sow it on, it was observed
that "Fife" wheat seemed to be "running out."
It would not grow so well, and the character of
the grain itself appeared to be changing. In the
meantime, however, small quantities had been
sent to Minnesota. In the rich prairie land it
had found a new field to conquer. Year by year
it was spreading north and west, overflowing into
what is now known as the vast Canadian wheat
belt, until it had finally won the position it holds
to-day, a veritable mint to the Dominion and to
a great part of the United States, a source of

the bread supply to no small extent of the modern
world.

Just one little incident, and we will close.
Some years ago, Mr. Fife, when visiting an old
neighbor, spoke of the change in the Ontario-
grown grain above referred to, and regretted that
he had not saved some of the original seed, in
order that he might satisfy himself as to whether
the grain or the land had most deteriorated. The
neighbor's wife then remembered that, many years
before, in the early days, she had plaited a little
"quern," or handmill, from some of the ripe
wheat, and had decorated it with ribbons, intend-
ing to present it to Mr. Fife as a souvenir. She
had, however, neglected to present the little gift,
which had, in consequence, hung on the walls of
her house for many a year. A search in the
garret brought the little quern to light again.
A few grains were still found in it, and with
these, in his old age, Mr. Fife repeated the ex-
periment of his youth. The grain from these
proved to be of very fine quality, but through
mismanagement of those to whom Mr. Fife en-
trusted the seed, the product was lost track of.

Such was the history of Fife wheat.

From the above account it may be judged
that, in all probability, Fife wheat may, as the
prairies become exhausted, refuse to grow as it
does to-day. However that may be, the fact is
not altered that, by his keen observation and
care, the late Mr. Fife rendered a tremendous
service to his country. With his example before
them, farmers must get some inkling of what it
may mean to neglect the apparent "freak" in
farm or garden; and perhaps the great results
which he accomplished may inspire some other
farmer to render an equal service to his age.

What is the Farmer's Best Power?

Editor "The Farmer's Advocate":

What is the best farm power? is an important
question to many farmers. I do not think there
is a power suitable and cheap enough for an
average-sized farm. Now, let us look at the
windmill: For grinding, for which it is mostly
used, it is far from being good; the plates must
be set so that they scarcely touch, or
they wear out shortly, and if they are
not close they grind very coarse. To my knowl-
edge, farmers owning windmills take over 50 per
cent. of grain to be ground. Few with wind-
mill cut turnips with it, because the wind is not
blowing when wanted, and turnips cannot be cut
up days ahead. Windmills, also, are very dan-
gerous, and very expensive to keep up, some
farmers not using them—that have them—for fear
of them running away and causing fire. A wind-
mill is all right, set on a tower, for pumping
water, but for anything else I do not consider it
is.

A gasoline engine, in my opinion, is the only
general-purpose power that should be used as a
farm power. But will they pay? Most farmers
can get their grain ground, straw cut and wood
sawed by their thresher for from \$15 to \$30 a
year. Is it going to pay a farmer to put in a
gasoline engine, paying \$300 or \$400 for same,
when the work may be done for the above-named
amount. The work is also done much more
quickly and better, thereby saving much time and
giving more satisfaction. It also enables the
thresher to make more use of his engine in the
slack season. In conclusion, let me say, I fail
to see where any man can see a profit in owning
an expensive farm power. FARMER.
Ontario Co., Ont.

Serious Timber Problem Ahead.

Editor "The Farmer's Advocate":

We very much appreciate the position you have
taken in the very important matter, the care of
wood-lots. It is now evident to most people
that there has been a wanton destruction of much
valuable timber in our timber limits, by not leav-
ing the smaller timber to develop after cutting
the larger timber.

We use in our manufacture chiefly hickory, rock
elm, white ash, whitewood and basswood. All
of our hickory and whitewood, for some years, we
have imported from the United States. Lately
we find that Canadian white ash is about exhaust-
ed, and our chief supply is now from the United
States. We find that during the last two years
we have had to import about half our supply of
rock elm from across the border. We are still
able to get our basswood in Canada.

We use about 1,000,000 feet of all kinds
of lumber per year (crating included). The
prices of these kinds of lumber have advanced
from 60 to 100 per cent in the last fifteen or
twenty years. Unless there are large timber
limits not yet opened up, it appears to us that
the timber problem will soon be a very serious
one for Canada, and the sooner our timber is
saved from unnecessary waste, the better.

McLAUGHLIN CARRIAGE CO., Ltd.
Oshawa, Ont.

Getting a Perfect Stand of Corn.

It very seldom happens, says the Minnesota
Agricultural Experimental Station, that a perfect
stand of corn is secured. The intention is to
plant three or four or five kernels per hill, but if
the number of stalks per hill be counted and aver-
aged for the whole field, only two or three stalks
per hill would be found. The reasons for this
imperfect stand may be summed up under three
heads, viz.: (1) Lack of germination tests; (2)
using tip and butt kernels; (3) using seed that
is not uniform in size. Since the stand is the
basis of yield per acre, it is essential that a full
stand be obtained. Therefore, the value of the
above three points cannot be overestimated.

RESULTS OF SEED TEST WITH CORN.

	Butt Kernels.	Middle Kernels.	Tip Kernels.
100 kernels planted.....	88	89	68
Per cent. germinated.....	177 in.	196.6 in.	151 in.
Total growth in 20 days.....	2.0 in.	2.2+in.	2.2+ in.
Average growth per plant.....			

One hundred seeds were used in each case.
Planted at same time and same depth. Measure-
ments made each day until plants died. Seeds
were planted in sterile sand; therefore, what
growth took place must result from the stored-
up food in the seeds.

DISCARD TIPS AND BUTTS.

Many people think that the tip and butt ker-
nels must be planted to ensure the filling out of
the ears, but such is not the case. Each kernel
planted from any part of the ear will grow an ear
with a tip and a butt. The kernels from the two
ends of the ear should be discarded, as they do
not produce such good plants or ears of corn as
those from the center of the ear; neither is their
germinating power so good.

USE UNIFORM SEED.

As corn is usually planted with a hand or a
horse planter, and these machines are not made
so as to adjust themselves to various sizes of seed,
it is apparent that best results will be obtained
by using seed of uniform size and shape. If, for
instance, the small tip kernels and the coarse,
thick, butt kernels or other irregular and uneven
kernels are used, the hole in the disk plate will
plant but one or two of the large seeds and five
or six of the smaller ones, or, perchance, two ker-
nels get wedged into the mouth of the disk and no
seeds are planted. Thus, an uneven and imperfect
stand is obtained.

Therefore, in selecting ears for seed, take those
(other things being equal) that have the most uni-
form kernels, and discard all butts and tips.
Grading the seed corn by running it through the
fanning mill will help to give uniform kernels for
planting and to secure an even stand of corn.

Seeding with Clover.

Editor "The Farmer's Advocate":

I have been very much interested lately in
reading the different items on the growing of
clover, but the most of them seem to finish up
when they have secured the catch of young seeds,
and fail to give anything as to the growing of
the seed itself. Well, I think the growing of the
seed is a kind of lottery business, but we can lay
down a few facts as to securing the catch of
young seeds, and as it is rather expensive to fail
in, especially when clover seed is high (as it is
this year), we should have everything laid out
properly so as not to miss the crop. As to the
best nurse crops to seed down with, I think that
wheat (spring or fall) and barley are a great deal
surer than oats, and although it comes out all
right sometimes with oats, we never calculate to
risk seeding on oats if we are sowing enough
wheat or barley to fill out the required number of
acres to be seeded down. Of course, there is a
great deal of difference in seasons as to the risk a
person runs in securing the catch of seeds, as in
wet seasons they hardly ever fail, while last sea-
son we had a good growth of young seeds on
clover sod that was plowed down late the fall be-
fore, and got by sowing about 3 pounds to the
acre. But that does not always happen, al-
though, if a person will top-dress the land to be
seeded down with a very light coat of farmyard
manure, he can almost always depend on a sure
catch of seeds, although it will probably take the
soil a little longer to dry in the spring. As to
the number of pounds of seed to be sown to the
acre, 2 pounds might do in a damp season, while
10 would be none too much in a dry one, and I
think, for the safety of keeping up the rotation,
it would be better to sow nearer 10 pounds than
2, because if the season were dry, by having the
little plants thick, they would be more likely to
hold the moisture and protect themselves from
being scorched by the sun after the crop of grain
has been taken away. If there is also a good
long stubble left it will hold the snow and let
air down into the plants, if the surface becomes
coated over with ice during the winter. Now,
when we have the young seeds securely caught,
we have the finest crop on the farm for improv-
ing the soil, both enriching and keeping down
weeds, as all weed seeds that shell out from the

nurse crops remain on the surface of the soil, sprouting and spoiling, while those that are under have to remain and be smothered out.

Durham Co., Ont.

A. E. O.

Educationists at the O. A. College.

Recently, nearly 1,000 members of the Ontario Educational Association met in convention at Toronto. At the close of the Convention, a large delegation of the members of the Association visited the Ontario Agricultural College at Guelph. A definite programme was outlined, and strictly adhered to, thus enabling the visitors to make the most profitable use of their time.

First, the dairy stables were visited to watch the milking of cows by machinery. Several milking machines have been tried, but not until this year has a successful attempt been made to solve the greatest problem of the dairy business. This machine, however, has given sufficient satisfaction to warrant Prof. Dean making the statement that in ten years milking machines will be as common as self-binders. In the dairy building Prof. Dean briefly outlined the work of the department. By experiment, they have proved that the souring of cream is not a necessary part of buttermaking, and also that green cheese, perhaps the most indigestible thing a man can eat, may be cured or ripened at the low temperature of 40 degrees. Ripening at a low temperature secures better texture and better flavor.

At the Poultry Department, Prof. Graham surprised the visitors by telling them that for two winters hens kept in a house where the temperature went as low as 13 degrees below zero, and watered only by the snow which fell in the yard or was shovelled into it, had made the best records in egg production. He advocated the use of trap nests to test the individual egg production, for many hens do not lay any eggs, even though they frequently go on the nest. A strong, robust hen should lay 200 eggs a year, each egg capable of producing a chicken, and a hen which lays less than 120 eggs a year does not give any profit. When Mr. Graham exhibited the cramming machine for feeding chickens, the teachers asked if he could not recommend a similar machine for quick delivery of English grammar into the craniums of the small boys?

In the Physics Department, Prof. W. H. Day showed an experiment in grain-growing. Peas were planted in three crocks. One crock was left as when planted; through the second air was forced so as to change the air in the soil once in three days; and through the third air was forced so as to change the air once every day. It was found that the peas grown in the third crock gave a twenty-per-cent. larger yield and a much better sample of grain than those grown in crock No. 1, thus showing the advantage of good tillage to permit a free circulation of air in the soil.

At noon lunch was served in the gymnasium, and in the afternoon the Macdonald Institute and Macdonald Consolidated School were visited. The teachers were very much interested in the work of the Consolidated School, and in the outline of this educational experiment, conducted by Principal Hotson and President Creelman, a trustee of the school. As outlined, the school is proving a very great improvement on the rural school system where each section has its own school. A strong proof of this is the increased attendance. In the rural schools of the Province the attendance is less than 50 per cent. of the children of a school age, while in the six sections here consolidated the attendance is over 90 per cent. The school is better graded, the instruction given is broader, including nature-study, manual-training and domestic science. The system of education is more practical, as the children learn by seeing and by doing, and not merely by reading and memorizing. The children are conveyed to and from the school in vans, and during the past winter 23 pupils in the First Form, who came a distance of six miles or over, did not miss a day. From an educational standpoint, the consolidated school is incomparably ahead of the separate-section schools, and there is only one disadvantage—it costs slightly more. But only slightly more, for once the initial cost of the new school has been borne, the only additional expense is the cost of transporting the children.

The delegation visiting the College was made up largely of principals of schools, trustees and inspectors. As one of these explained, the average school teacher's salary is too small to allow of the luxury of a visit to the College. However, thus composed, the delegation was a very influential one, and, as one enthusiastic inspector said he had learned more in a day at the College than in a week at the Convention, one is safe in stating that the visit was a profitable one both for the teachers and for the College. Despite the fact that agricultural colleges are being established in three of the other Provinces of the Dominion, the attendance at the Ontario Agricultural College is increasing. All that is needed is that more of our people should visit the College, and become acquainted with its work and courses of study, and not only will the attendance at the College increase, but also the farming operations

of the Province will yield larger returns. The visit of the Educational Association to the College should arouse an interest on the part of teachers all over the Province, not heretofore manifested in this institution. To establish a still more permanent influence, especially upon the coming army of rural public-school teachers of Ontario, provision should at once be made, under the new Education Act, to have one of the new Normal Training Schools located in close affiliation with the O. A. C.

Michigan's Forestry Problem.

Michigan, once possessed of a natural forest to be proud of, says a correspondent to Hoard's Dairyman, is fast being despoiled of her trees, until a really fine tract is rarely found, north or south, within her boundaries. The State Forestry Commission, under the leadership of Hon. Charles W. Garfield, of Grand Rapids, is doing all it can to check the wholesale slaughter which is going on, and to prevent total extermination of our once splendid timber growth.

One who has visited the vast stretches of prairie country in the West, where for hundreds of miles not a tree is in sight, except occasionally along some watercourse, can but deplore a similar condition or outlook for our State.

Fine farms, fertile land, abundant crops undoubtedly exist there, but there is nothing to break the monotony of the landscape, and the beholder longs for the trees which beautify and bring harmony and the needed variety to the scene. The greed for gain is the sole argument in favor of clearing up the land and leveling the wood-lot on the average farm. Men see added dollars in the sawlogs or the cordwood which the trees contain.

Professor Bogue, of our Agricultural College, shows how to treat the farm wood-lot so as to get a revenue out of it, and still allow it to remain. At the same time, judiciously cared for, such a piece of timber will actually increase in value.

The Best Roof?

Editor "The Farmer's Advocate":

As no doubt many of your readers will be building or repairing old roofs this summer, I think, perhaps, a little experience of mine may interest some. Twenty-four years ago I helped erect a shed about 24 x 50, to store straw in, on my father's farm in England. We covered the roof with corrugated galvanized iron sheets, 5 ft. by 2½ ft., or about that. I expect to have to re-roof my barn within a year or two, and am trying to get posted as to best, cheapest and most desirable roof covering, so a few weeks ago I asked for particulars about this roof. To quote my father's own words: "It is practically as good as ever it was, and has never been mended, and never leaks." I think that is a pretty good record. We all know where shingles would be in 24 years. Neither the man who helped me nor myself had ever laid an iron roof before, so we were as green as any one can be. The rafters were not covered with lumber as for shingles; we spaced the boards so that one came at each end and one in the middle of each sheet of iron. In this way it would not take more than one-third as much lumber as for shingles—quite a saving, now that it is so high in price. Now, I should like to hear from some who have had experience with the various prepared or composition roofings, mica, felt, or by whatever name they may be called. Perhaps some of them may last as long as iron and be cheaper. Anyway, I and others would like to hear whether they have proved satisfactory, or the reverse.

A. HUTCHINSON.

Wellington Co., Ont.

Lucerne for the Hillsides.

It is rather a significant fact that those who object most strongly to alfalfa, on the ground that it interferes with rotation, are, in not a few cases, men who grow two or three crops of grain in succession from the same field. Alfalfa is not recommended to displace clover. Clover should be grown on all the cultivated land in short rotation, bringing it in at least once every four years. The alfalfa should be considered an extra supply of fodder, and should usually be grown on the rough, hilly lands, unprofitable to cultivate. Being a nitrogen-gatherer, it rather improves the land it grows on, especially if a little ashes, and possibly bone meal, are used on the alfalfa piece from time to time. When that land is plowed out of alfalfa it will be more productive than when originally seeded down. Meantime, the manure made by the stock that consumed the hay will have gone to enrich other parts of the farm. We know no other means of building up a hilly farm that will compare with the plan of seeding the hillsides to lucerne and feeding the hay or green crop to stock.

Alfalfa for steep hillsides is one of the best ideas that has ever been introduced into Ontario agriculture.

Oak, White Ash and Rock Elm Practically Extinct in Ontario.

Editor "The Farmer's Advocate":

At the present time, for commercial purposes, such timber as oak, white ash and rock elm are practically extinct in Ontario, and we are obliged to purchase much of this material in the United States. We think the proposed bill to exempt farm woodlands from taxation is a move in the right direction, as there is no doubt, if some care is given to woodlands, that it will ultimately prove a very satisfactory investment.

DAVID MAXWELL & SONS.

THE DAIRY.

Factories and Hand Separators.

Editor "The Farmer's Advocate":

Your readers will be interested in the following circular and foot-note, recently issued by the Montreal Produce Merchants' Association:

"Gentlemen.—The Members of the Montreal Produce Merchants' Association have, during the past season, been still further impressed by the inferior quality, generally, of butter made from hand-separator cream, especially when gathered less frequently than every day, and they desire once more to warn makers and patrons against the use of the hand separator. To patrons who find it desirable on other grounds than mere convenience to use hand separators, they should strongly advise that the cream be conveyed to the creameries every day in jacketed cans, properly insulated. Makers are further most strongly urged to keep hand-separator cream apart from that separated at the factory, to churn it by itself, and to pack and sell the product separately. If these precautions are not rigidly observed, there is no doubt that our reputation for producing finest butter and the profitability of the industry will suffer. I am, gentlemen,

Yours truly,

"J. STANLEY COOK, Sec."

"Note.—Before being issued, the above circular letter was submitted to the officers of the Department of Agriculture of the Dominion and of the Province of Quebec."

You will not fail to notice the insidious wording of the circular, and especially of the foot-note, which is evidently intended to give the impression that the Departments of Agriculture of the Dominion and of the Province of Quebec agree with the views expressed.

You are well aware that cream-gathering factories are rapidly supplanting milk-gathering factories in Ontario, the United States and the older dairying countries, and that the advantages of their use far outweigh the disadvantages of their abuse, referred to in the circular.

Of course, if cream which is sent to the factory only every second or third day is mixed with fresh cream, the resulting butter cannot possibly be of good quality; but this is an abuse of the new system, and not a good reason for condemning the use of farm cream separators. It is needless, also, to point out that cream must be sent to the factories in properly-covered cans. In this respect it needs just the same care as milk needs. The insinuation that it needs special care over and above that given to milk is quite unwarranted, and again shows the bias of the authors of this circular.

Apart from the many obvious advantages of the farm cream separator, such as the providing of fresh warm skim milk for the young stock, and saving of time and labor in hauling the milk to the factory, there is the great educative advantage of the farm separator. Those who use modern machinery and appliances become, through the very use of these appliances, better and more intelligent workers. Their ideas are broadened, and, seeing the necessity and utility of modern methods in one department of their work, they will not be long in applying the same methods to every department.

I have referred above to the saving of time and labor of hauling milk to the factory. Needless to say that, in a cream-gathering factory, the plan which must be adopted is that of having be let by tender at the commencement of the season; thus four or five teams will do the work which in milk-gathering factories requires often as many as one hundred teams and one hundred men.

The Montreal Produce Merchants' Association cannot stop the onward march of progress. They are attempting to delay it, but it will not be helped if they will find their interests lie in helping it along, and assisting in the education of the farmers of this Province, instead of acting as a drag on the wheels of progress.

B.

Selection of the Dairy Cow.

No problem in recent years, concerning the dairy business, has attracted the attention of dairymen and investigators more than the relation of the type and conformation of dairy cows to the economical production of dairy products.

A cow may be considered a machine, for the purpose of converting coarse or rough feed into a refined product called milk. Different cows have different capacities for producing milk from the same amount of food, just as some steam boilers have the power to generate more steam per pound of coal.

It may be said, in general, that all cows utilize the feed they eat (cover and above that required to maintain the functions of life) for one of two purposes, provided the animal is in good healthy condition, namely, for the production of milk, or for increase in live weight.

DAIRY—BEEF—DUAL PURPOSE.

Cows which, through hereditary tendency and environment, have developed a capacity for transforming a large quantity of feed into milk, instead of utilizing the same for an increase in live weight, are known as dairy cows.

Other cows, from influences of the same character acting in the opposite direction, have developed a capacity for transforming their feed largely into flesh and fat on their bodies, and the milk produced by such cows is of minor importance, being only sufficient for the nourishment of their calves; these cows are known as beef cows.

Between these two classes we find a large number of cows combining the characteristics of the dairy cow, in so far as giving a legitimate amount of milk is concerned, with those of the beef cow, and also producing calves which are profitable to the feeder for the production of beef. Such cows are usually spoken of as dual-purpose cows.

For these widely different purposes, dairy cows have shown a conformation greatly differing from that of the beef cows. The conformation and external appearance of a beef cow is a fairly safe rule and guide by which to judge her merits for her particular purpose, but it is not so easy a task to judge the capacity of a dairy cow for economical production of milk and butter-fat from her external appearance and conformation.

It is plainly evident, then, that success in dairying depends upon the productive capacity of the individual, rather than upon the herd or breed, inasmuch as there are such wide variations in different cows of the same breed, in regard to the amount and composition of the milk they produce.

The merits of a dairy cow can be estimated by accurate record of the number of pounds of milk she has given, and by testing the butter-fat with the Babcock test; but this alone will not completely express all the qualities that is possible for the dairy cow to possess. The question as to how long the cow has the power to continue the flow of milk, during the period of lactation and from year to year; whether she has a strong constitution, which commonly indicates the power of producing an offspring equal to or better than herself, are points of excellence to be desired in the ideal dairy cow. These factors, aside from the regular yield of milk or the actual pounds of butter-fat, must depend upon the good judgment of the dairyman to select his animal by external conformation.

The type of a good dairy cow depends upon anatomical and physiological principles. Such expressions as "the dairy cow may be wedge-shaped," "she must have large nostrils," "large mouth," "thin neck and large paunch on a comparatively light framework," "broad between the thighs, with a large udder and large milk veins and wells," are, strictly speaking, the means to an end.

The first and all-important point in selecting a cow is to note the size of the udder—whether it is large, uniformly placed, with teats placed at their proper distance, to note whether the udder is flabby and not fleshy, which is particularly apparent immediately after milking. According to the laws of correlation, a cow that is a large milker must necessarily develop a large udder, and if free from fleshiness, the size of the udder is one of the truest indications of efficiency in an animal.

The development of a large udder necessarily involves a large blood supply, the blood being the intermediate transitory step from the raw material of the food to the final transformation into milk which takes place in the udder. A large blood supply necessarily means a large circulatory system, a large heart, and large arteries and veins, hence the size and tortuous appearance of the milk vein which runs from the udder toward the anterior portion of the body is a good sign for the dairy cow. All good dairy cows, however, do not have tortuous veins, for the reason that a second vein, leading up from the udder through the abdomen, may be large and receive the greater portion of the blood that comes from

the udder. A large and well-developed circulatory system necessitates a large respiratory apparatus to purify the blood required in the system; and, furthermore, the heart, which is the pump that circulates the blood, must be supplied with ample energy, stimulated by a well-developed nervous system to keep up its functions.

OUTWARD SIGNS ARE ACCESSORIES.

The blood is made from the food that the cow consumes; hence, to keep an ample and steady supply of blood, there is necessary a large and efficient digestive apparatus. These are the important factors which are closely connected for the production of milk, and the accessories, such as the large nostrils, which necessarily must admit a large supply of air to the respiratory system; a large mouth, with a good masticating apparatus to supply the digestive organs with properly prepared food, bright eyes, wide forehead indicating a strong nervous center, and large openings in the spinal column, through which pass the nervous cords leading to the digestive organs and udder, are all features indicating economic production of milk.

TEMPERAMENT COUNTS.

While it is generally advisable to have a cow of good size, it has, however, been found that size does not enter in as a factor of profitability. Small cows, with strong nervous systems and great activity, are probably the most efficient producers of milk if they are well cared for and kept in a comfortable condition. A cow of this nature reduces her flow of milk when ill-treated more quickly than she responds to good treatment with an increased flow. A cow with a strong nervous constitution, phlegmatic temperament, not excitable, although not so highly efficient as a milk producer, is probably the best cow for the average dairy. Discomfort or ill-treatment apparently do not affect the milk supply as much as in cows of more nervous temperament. The saying that "A dairy cow for the dairyman, and a dual-purpose cow for the dual-purpose man," is not inappropriate.

While these are all facts which tend strongly toward indicating the proper type of a dairy cow, it is not saying that a dairyman should rely alone upon conformation, for the Babcock test and the scales with the milk pail are the only accurate methods of determining the profits and loss of any particular animal. We have the assurance of every successful dairyman that they are most essential, even for the man with but one cow, for by this method only can dairying be put on a systematic and profitable basis.—[Oscar Erf, in Kansas Agricultural Review.]

Weight of Cream.

The weight of cream of various fat per cents, is of importance when so much of the gathered hand-separator product is bought by weight and test. Cream containing 25 to 30 per cent, of fat has the same specific gravity as water, while that with a higher or lower percentage varies in proportion. We give below the table that shows the comparison at different per cents.:

Pounds.	Pct	weighs	Pounds.
10	10		10,200
11	15		10,072
11	20		10,045
11	30		9,959
11	35		9,800
11	40		9,650
11	45		9,500

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

The Devil in Trade.

When we read, says the Irish Homestead, of the continual cases which come up in the courts of England of the unlawful use of margarine, we are inclined to believe that when the traditional form of the devil became too notorious, so that anyone could recognize him, he decided to embody himself in margarine, and from thence send up subtle suggestions of dishonesty to the grocers who handled him. Anyhow, it is written his forms are legion, and some of them we now know, are margarine, cocoanut oil and solidified milk. "The devil in trade," would be an excellent and exciting subject for an article, and we are rapidly accumulating material for it. It will be the greatest religious sensation of the age when it appears, and will make the modern grocer's shop a place of weird terror, like the boxes of earth in that excellent vampire story, "Dracula."

Relation of Feeding to Performance of Cows.

C. D. Smith, M. S., Director Michigan Experiment Station, in the Holstein-Friesian Register, writes:

"The aim here has been to produce a relatively large cow, in which digestion and secretion should be so evenly balanced that the cow should not grow excessively thin nor excessively fat. Before the milk-giving functions began, it was to be expected that if the calf and heifer should be abundantly fed, the assimilated products would necessarily be stored in the body as fat. If the result of years and generations of selection and breeding have given the calf an irresistible tendency toward milk-giving, if this tendency manifests itself early in the development of a sizable, shapely and well-balanced udder, with evidences of milk veins, and a trend of blood towards those parts, no alarm need be felt if the so-called dairy form does not manifest itself until, after the birth of the calf, the giving of milk shall reduce the superabundant fat which nature always stores up in the healthy female in the few months prior to the birth of her progeny. This theory, in our case, demonstrated its truth in our experience."

How has it been in the experience of Holstein breeders? I make here extracts from letters I have received from some of these:

W. S. Carpenter, of Michigan, writes: "I can say that the best performers I have raised have, as a rule, when eighteen months to two years old, looked and acted a great deal like steers, and nothing is more pleasing to me than to have a heifer between one and two years old grow large, strong and beefy, provided she carries a large paunch. I have had two that did not carry the large paunch, who, nevertheless, put on meat and fat, and grew to good size, but were not worth nineteen cents for milk cows. I am inclined to believe that until they are one year old they want to be kept in as thrifty a condition as possible, but not fat. I am inclined to believe that, if allowed all the whole milk they will take, they will not develop along the best lines, but do think that if the milk is warm skim milk, oats, bran and oil meal, they can have every pound they will eat."

W. B. Barney, of Iowa, writes: "My idea would be that the kind of food used in growing and putting on the flesh might have much to do with the future usefulness of a heifer in the dairy. I should not fear bad results from a heifer turned on heavy pasture, and becoming fat on the same, or from the use of oats, bran and silage for winter feed. There are some feeds, like corn, that appear to have the effect of retarding the development of the milking organs that I should avoid. I have owned heifers that, when they came in at two years old, I have sometimes thought had been fed rather heavy, but as they developed, and had their second calf, I have been very certain that they were larger, stronger, better and more rugged cows for having been well fed at an early age."

A letter from T. G. Yeomans & Sons says: "We are never afraid of too good growth and vigor in a dairy animal, but we never wish them fat, as that term is commonly used. We have never fed our young females corn or highly carbonaceous foods until after they have dropped their first calf. We once almost ruined a choice-bred heifer calf by allowing her to have full new milk during the first several months of her life. She was as fine a beef as a nice Shorthorn, but never gave the milk we had a right to expect she would. We have had the opinion that the dairy form appears, or begins to appear, first, when the heifer is well advanced toward dropping her first calf, and continues to develop more rapidly after calving. Aaggie 2nd was a good instance of this. She was very much of a 'steery' looking heifer until within a few weeks of her first calf, but from that she developed into one of the finest forms of her breed."

Henry Stevens & Sons say: "Our observation and experience has been that, to obtain the best results, it is better to keep a heifer in just a good thrifty, growing condition until a year old, especially so under eight months old. If kept fat from birth up, the skin is apt to acquire a thickness from which it very slowly and in some cases never recovers. They also appear to get heavy in the neck and around the jowls. We have known animals that we think have been permanently injured by high feeding when young. We don't wish to convey the idea that an animal should be kept poor, or anything of that kind, but in a good thrifty, growing condition. We also think a heifer should drop her first calf at from two years old to twenty-six months, as we think they make better cows to commence developing the milk organs when young, although they do not get their growth quite as quickly. If they lack size, we think it a good plan to let them go farrow the next year, or milk them from twelve to sixteen months after their first calf before breeding."

Gillett & Son, of Wis.: "We do not object to some beef in the young Holstein, providing it has been put on with the right kind of food, and by judicious use of the same, and we are inclined to

believe that animals so kept have a tendency to produce milk of a better quality, and more of it, than those that have been allowed to come up in a lean form. Certainly, growth in any animal can be produced more economically than when the animal becomes farther advanced in age, and for this reason, if no other, we like to keep them growing and get all the size we can prior to their coming in milk."

From this symposium, the lesson to be drawn is that practice and theory agree in keeping the young dairy animal growing at the top of her speed, furnishing abundant feed, not too fattening in character, and giving, at the same time, abundant exercise. Nothing but the judgment of the feeders can determine the quantity of food to be given to the individual calf.

POULTRY.

Going Light.

The keeper of certain flocks of hens frequently finds one dead under the perches which shows no sign of disease, except that she is very light for her age. As these hens which "go light" are very often the best layers, and have been laying for a long time steadily, there is a common supposition that they have overlaid, and so drained the strength from their bodies; that they die as a result of the long-continued laying. I used to take this commonly-accepted explanation as the truth, till I noticed that in every case that attracted my attention, the flocks in which the hens were light were housed in buildings where filth was too much in evidence. One case attracted my attention particularly, and set me on the trail of the filth. A large flock of hens was housed in a long building. The keeper and I had been making a study of laying types, and decided to divide his hens into two flocks, separated by a partition running through the middle of the building. We put the hens which we thought conformed most nearly to the laying type on one side of the partition, and those which we thought less likely to lay on the other side. I was in the building frequently to watch the result of our experiment. I had never before seen so many hens going light. At the same time, I noticed that there was always a peculiar offensive odor about the building, which came from the droppings souring and moulding on the earthen floor, which was damp enough to keep them from drying out. I afterwards noticed that the filth was always evident about the quarters where hens were going light. As the hens afflicted with this malady showed no signs of bowel trouble, it was difficult to understand how the filth affected the matter, till a post-mortem examination of the dead hens revealed the fact that in every case the liver was abnormal. The hens, scratching about in the filth, pick up bits of it, which bring on liver trouble, from which they finally die.

An experiment, in which a hen going light was penned in a small pen with a few healthy hens, proved that it spreads from one to another, as all of them, in a short time, began to go light, probably from picking up bits of the droppings from the sick hen with their food.

That the best layers are most subject to it, may perhaps be explained by the fact that heavy laying makes their systems less capable of throwing off the effect of the filth which they eat.

The remedy is a simple one. Keep the hen-house clean. An offensive odor about the building is a sign of coming trouble. W. I. T. Alta.

Canadian Eggs in England.

Canadian eggs are in demand here at the present time, yet, in order to create a bigger demand for this product, it is necessary that Canadians should study and obtain a fuller insight into the methods of packing more particularly in favor here. For this reason I give the result of an interview with an extensive importer and seller of eggs in this district:

"As a start off, it may be said that Canadian pickled eggs have seen their day in England. The eggs most in request now must be glycerined.

"The packing, also, is a great thing. The size, for instance, of an ordinary everyday box of Russian eggs measures about six feet long and something like 22 inches wide, each box containing 1,440 eggs, which English importers classify into what is called 12 great hundreds, each great hundred meaning 120 eggs, and weighing, on an average, fifteen pounds.

"At auction, the seller never refers to his eggs as so much per box, but so much per hundred. As is the case with fruit, the packing of eggs is everything. The box itself should be of good stout Canadian wood, and the sides should not be too complete board, but preferably two pieces of wood with a width of about 1/2-inch between them. This may be considered a

detail, but it is of vital importance to the freshness of the eggs on arrival, as it admits the air, thus keeping the eggs at a certain even temperature. The box itself should be divided down the center (crossways) by two boards, each board being about two inches apart. Thus we find the box apportioned in, say three feet at first, then comes the first partitioning board, a space of two inches, then comes the second board, and after this, the remaining three feet of the box. The central apartment means a big thing, as, when the eggs get into the hands of the small wholesaler, it is quite easy to saw the box in half within the width of these two center boards, thus separating the box absolutely, without having to nail on a side, with a consequent risk of breaking the contents. In many cases the retailing man can only afford to take half a box when trade is bad, and this idea would specially meet his requirements.

"Next comes the padding. Russian peasants, first of all, lay a thick layer of wood-pulp shavings at the bottom of each of the two divisions, and on the top of this they place what may be called the first shelf of eggs, every egg being in the same direction, and each division of the box containing ten rows of 18 eggs, making a total number of 180 in a shelf in each division.

"A further layer of shavings is again placed on top of this, and so on, until we have four shelves of eggs, when the whole of the 1,440 eggs are fastened down by two boards, with about two inches width between them, as mentioned before, for reasons of temperature.

"English importers have always been prejudiced against buying small-sized boxes of eggs, their chief reason for this being, that in course of transportation, it only requires one single man to lift them, resulting, in many cases, in breakages in the contents, as it is not to be expected that one man can carry a box of eggs with the same degree of sureness and safety as two men can; in fact, this very reason acts detrimentally to Irish eggs on the British market at the present time."

J. B. JACKSON, Com. Agent.

Leeds and Hull, Eng.

Eggs on Plain Diet.

It may interest you to know that I have had White Wyandotte hens laying well since November 28th, even when the temperature was 44 below zero. They were fed without soft food or mash, and without any fancy foods. They simply had a good warm henhouse, grit, meat scraps and separator milk. They were incubator-hatched chicks.

WM. H. BUTTERWORTH.

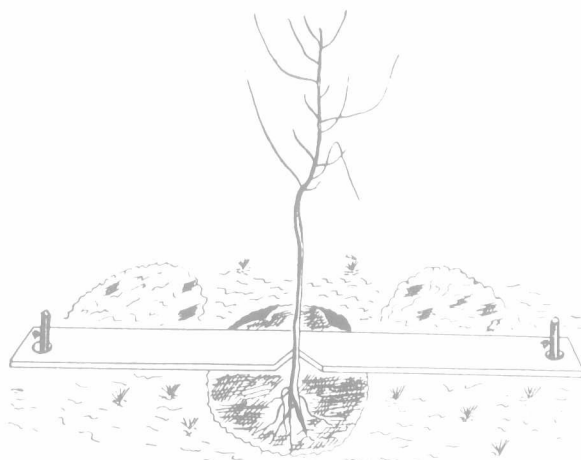
Algoma, Ont.

GARDEN & ORCHARD.

A Planting Board.

In planting an orchard, one of the best means of getting the rows straight is to stake out the position for each tree before beginning to plant. Laths are excellent for this purpose. Then, when all has been properly staked out, a planting-board should be used so as to ensure getting each tree in the exact position marked by the stake, previously placed right by sighting.

A planting-board is made of a light piece of board four or five feet long, with a hole bored in each end, and a notch in the center. It is well



A Planting Board.

to have two or three of these made exactly alike, one for the planters, and the others for those digging the holes. When a hole is dug, the notch in the planting board is placed around the stake and wooden pegs are passed through the holes in the ends of the board, and left in the ground, while the hole is dug and the board taken on to the next stake. The planters following place their board over the pegs and the tree in the notch in the center. It will thus be in exactly the same position as the stake which previously marked the hole.

Grape-growing in British Columbia.

To the Editor "Farmer's Advocate":

I have succeeded very well in growing grapes, and will give you my experience. Owing to the grapes grown in California coming in at a very low freight rate, and being more attractive than the eastern varieties which I grow, I find that in most all cases the people of British Columbia prefer the California fruit. So, right here, I am not going to advise anyone to go into grape-growing extensively, without taking into account the financial part of it. I raised this year over 20,000 pounds of grapes, and have not found a market for half of them. As I did the same last year, I am going out of grape-growing. I find the local market supplied by the California grapes, which come up to Vancouver by steamers every five days. The freight is 80 cents per 100 pounds, and the distance nearly 800 miles. Now, the C. P. R. (to encourage a new industry) charges me 78 cents by regular freight for 156 miles, and the lowest by express \$1.50 per 100 pounds, so the only market of importance is closed against me. People prefer to pay more for California grapes than the Eastern varieties which I grow to perfection. There are, of course, the markets of the Northwest to supply, and I will state how that is done. The wholesalers, say at Calgary or Edmonton, want a variety of fruits, such as peaches, bananas, oranges, etc. Well, at the coast they can make up a carload of mixed varieties and send them out by freight in a refrigerator car, and keep them in this iced car until all is disposed of, while I have to send out by express at the lowest figure, \$2.40, and in 1000-pound lots at that, or, lesser lots, \$2.50 per 100 pounds. These are the plain facts regarding the markets; now I will give my experience in grape-growing in the dry belt at Lytton, at about 700 feet elevation. My soil is a rich, sandy loam, and I have chosen a part for grapes well sheltered from winds. The varieties are the Concord, Worden, Delaware, Niagara and Sweetwater. I find this grape does exceedingly well, and the only thing against it is that it is not large and is green, while the market here calls for a larger grape, black or red preferred, even if the quality is not so good.

I set them out in rows ten feet apart and about eight feet in the row, selecting the vines of one or two years old, taking care in planting them out to cut well back to one or two buds, at the same time cutting clean off all bruised roots, taking good care to have the hole large enough so I can spread out the roots. I keep the rich top dirt to put in first, and spread the roots out as nearly as possible to the way they grew, pressing the earth down around them. Then I fill up the whole, and if dry I put a bucket of water in it before it is quite filled so as to settle the earth well around the roots.

Grapevines need the same clean culture as a field of corn, and so do all other young fruit trees. The suckers must be pinched off, and after the first year a trellis of three wires to keep the vines up off the ground and the berries clean. They must be well pruned back for the first two years, and then the grower can expect on the third year quite a crop of grapes, and from that time on they must be pruned for fruit, always remembering the grape, like the peach, grows on new wood.

As to the varieties, I would take the old reliable Concord, then the Worden, Niagara and Sweetwater for commercial purposes. While there are many other good varieties, I think for commercial purposes these are the most reliable and best. I find the Brighton too thin-skinned to ship, and while the Delaware is very sweet and nice-eating, the berries are too small. There are not many locations in British Columbia where grapes can be grown that would be sweet and palatable for eating, although they can be grown almost all over the Province, but I venture to say not many would like to eat them. Good grapes can be grown from Lytton to the Lillooet, on the Fraser, and in southern Okanagan, at Peachland, also Summerland and Penticton, and Fraser, and in southern Okanagan, at Peachland, also Summerland and Penticton, and farther south; also on the Samilkamun, where at the Rector's I saw some California varieties doing finely, such as the Black Hamburg and the Catawbas, black and white. I myself have these varieties, which I find rather tender for this climate. They must be laid down in winter and covered up with earth, leaves, or some coarse straw, to protect them from severe frosts. This year I had some beautiful bunches of the noted Flame Tokay—a California variety—one bunch weighing 3 pounds 2 ounces. This and another beautiful bunch were expressed to England to be erow grapes equal to anything in the East, and at least two weeks earlier, but we have no encouragement from the railways, and we cannot compete with California, where they have cheap packages, labor and transportation.

I have given you the plain facts with regard to grape-growing in British Columbia, as I think fruit growers intending to go into grape-growing should know what they are up to. I know we

can grow the finest fruit in the world, and if the C. P. R. would give us a living chance we could make a decided success of grape-growing. This year and last I realized so very small a sum for my grapes that I intend to have all my vines grubbed out next spring.

THOS. G. EARL.
Lytton, B. C.

Neglected Orchards.

A week ago, one of the editors of this paper, while passing through a portion of Middlesex and Oxford Counties, began to count the number of orchards in sod. Out of a total of twenty-five, twenty-one were in grass, two were sown with grain, and two looked as though the owners possibly intended to cultivate them without any other crop. Giving these the benefit of the doubt, there were twenty-three orchards wherein were neglected the first principles of orchard practice. No doubt, if interviewed, every owner would have said there is no money in an orchard, yet not one of them has any ground for saying so until he is at least prepared to give his trees the full use of the land, cultivating as frequently as for a hoe crop throughout May and June, and then sowing a cover crop of clover or hairy vetches in July, to be plowed under early the following spring, and the cultivation repeated. A good many people think they are adopting fairly up-to-date methods when they use the orchard for a hog pasture, and, while there are several advantages in this plan, it is far from being the correct thing.

If orchard conditions were like those in the primeval forest, where the ground is shaded and the soil covered with leaves and filled with decaying vegetable matter, cultivation would be unnecessary. But, subjected, as our orchard lands are, to severe evaporation, and being liable to bake more or less, cultivation, or a substitute in the form of mulching, is necessary. Some years ago, in New Brunswick, the writer was passing an orchard with G. H. Vroom, Dominion Fruit Inspector in the Maritime Provinces. When thirty rods distant, Mr. Vroom remarked, "There must be a garden spot under one of those rows of trees." "How can you tell from here?" was the natural question. "By the difference in the foliage; wait till we get opposite the ends of the rows and see if I'm not right." True enough, when we drew closer, it was as he surmised, and at close range the difference in the foliage was striking. On the garden spot, which had, of course, received considerable cultivation, stood trees with a rich green, healthy foliage. Every one of the others had yellow, sickly leaves. Inspection revealed that the one row had a good setting of fruit, whereas the others had very little, and that was dwarfed. It was a convincing object lesson. "That's always the case," remarked the Inspector, who is himself a successful apple-grower in Nova Scotia. "I've noticed a great many like that. I can tell whether an orchard is cultivated or not by the look of the leaves. Healthy foliage means vigorous trees. That's what cultivation will do." If one must grow a crop of some kind in the orchard, let it be a late-planted hoe crop. With early preparation of the soil, frequent summer cultivation and heavy manuring, the trees may do fairly well under this system, though it would be much better to give bearing orchards the full occupation of the land. Until we are willing to do this it is no use looking for profits from apples.

A Niagara District Fruit Farm.

Mr. M. F. Rittenhouse, a native of Jordan, Lincoln Co., Ont., who made a fortune in business in Chicago, is giving to the Ontario Government, free, 50 acres of land at Jordan, to be used as an experimental fruit farm. The Hon. Mr. Monteith, Minister of Agriculture, says that Mr. Rittenhouse is giving the land absolutely untrammelled by any conditions. Not only so, but he has offered to macadamize the road leading to it, and to supply water from the reservoir built to serve the school garden given, at a nominal cost (and which is illustrated elsewhere in this issue of "The Farmer's Advocate"), by Mr. Rittenhouse to his old school section.

Jordan lies along the old Twenty-mile Creek, a short distance back from Lake Ontario, between St. Catharines and Beamsville.

Blowing Our Horn.

Editor "The Farmer's Advocate":

I have much pleasure in acknowledging the receipt of the premium knife, which has proven to be fully up to my expectations. Have taken your paper for some years, and would not like to be without it. The farmers of Canada should feel proud that they have such a publication as "The Farmer's Advocate" in their country, the columns of which are open to the free discussions of all questions relating to their occupation. One writer has said that it should be in the home of every progressive farmer in Canada, but I think were it to find its way into the homes of all unprogressive tillers of the soil as well, it would not be long till there would be fewer of such. As an advertising medium, it is second to none. The question drawer,

alone, is worth many times the subscription price of the paper, while the Home Magazine department furnishes pleasant and instructive reading for all the members of the family.

No farmer can afford to be without "The Farmer's Advocate." Wishing you and your paper every success.
Renfrew Co. W. R. KIRK.

THE FARM BULLETIN.

Have any of our readers tried the split-log drag, described and illustrated in our issue of April 12th? We shall be pleased to hear of any Canadian experience with this simple road implement.

The Japanese Parliament has introduced a bill, providing for the nationalization of railways, and authorizing the Government to compel companies to sell to it at a fair price.

Every rural public school this season should celebrate Arbor Day by planting trees and flowers, and Empire Day by flying the Canadian flag.

Trustees and teachers will read with interest and advantage the article on "That Old Schoolhouse," in the Home Magazine section of this issue.

New Secretary for Western Fair.

Mr. John A. Nelles, Secretary of the Western Fair, London, Ont., for some five years past, recently resigned his position, in order to devote his whole time to his increasing personal business. The Board of Directors were fortunate in having at hand, in the person of Mr. A. M. Hunt, of London, the right man for the office, to which he was appointed at their last meeting. Mr. Hunt is well known throughout Middlesex and Western Ontario as a man of executive ability and



Mr. A. M. Hunt.

The newly-appointed Secretary of the Western Fair, London, Ont.

unswerving integrity; having the full confidence of the agricultural community. Until some five years ago he was successfully engaged in farming in Westminster Township, near London South, and since then has been engaged as an auctioneer and valuator. He gained considerable experience in exhibition matters while President and Secretary of the Westminster Agricultural Society, which holds annually one of the best local shows in Western Ontario. He was also for a couple of seasons latterly on the Western Fair staff at exhibition time, amply demonstrating his capabilities. He assumed his new office on May 1st. The portrait which we publish herewith will introduce him to readers of "The Farmer's Advocate." Farmers and stockmen generally will be pleased to learn that the Western Fair Board have this year added about \$1,500 to the prize-list, \$300 extra being devoted to the horse classes, \$300 to cattle, \$100 each to sheep, swine and poultry, \$100 to dairy products, \$100 to horticulture, \$60 to agricultural products, and so on. The Western Fair of 1906 will continue in the forefront of the procession of top-notch agricultural and industrial shows.

Thoroughbred Horse Society Officers.

At a special meeting of the Canadian Thoroughbred Horse Society, the following provisional directors were made permanent, with the addition of Messrs. Jos. Seagram, of Waterloo, and S. Dymont, of Barrie—Honorary President, Senator Bostock, Victoria, B.C.; President, William Hendrie, Jr., Hamilton, Ont.; First Vice-President, W. J. Taylor, Victoria, B.C.; Second Vice-President, Robert Davies, Jr., Toronto. Directors—Andrew Smith, F.R.C.V.S., Toronto; Colin Sewell, M. D., 68 Louis street, Quebec; J. J. Dixon, Toronto; A. E. Ogilvie, St. James Club, Montreal; James Hurley, Guelph; A. W. MacKenzie, 1 Toronto street, Toronto; R. Dale, South Qu'Appelle, Sask. Secretary-Treasurer, H. Wade, Parliament buildings, Toronto.

Our Scottish Letter.

CLYDESDALES AT KILMARNOCK SHOW.

The show season here has opened, and there is little else being talked about in the West Country but good cattle, horses and sheep. Kilmarnock Show was held on Saturday last. It was an entirely successful event, with well-filled classes and a good attendance of the public. Clydesdales were an extra good show, and quality and numbers have probably never before been excelled at Kilmarnock. Young stock, in particular, were very strongly represented, and there is undoubtedly renewed life and vigor in Clydesdale breeding here. Two things are specially to be remarked on at Kilmarnock this year. The family-group prizes for the best five yearlings got by one sire were won by three sons of the celebrated Baron's Pride 9122. The old horse himself was not entered for competition. The first-prize group was got by the noted Everlasting, himself unbeaten as a yearling, two-year-old and three-year-old. The second group was by Baron o' Bucklyvie, also a very noted winner, and the third by Revelanta, winner of the Cawdor Cup in 1904. Everlasting is owned by Messrs. A. & W. Montgomery; Baron o' Bucklyvie, by Mr. Wm. Dunlop, Dunure Mains, Ayr; and Revelanta by Mr. George Alston, Loudounhill, Darvel. Had the old horse been shown, he would in all likelihood have beaten his sons. As it was, the champion female of the show was Mr. St. Clair Cunningham's two-year-old Minnewawa, whose sire was Hiawatha, and her dam White Heather, one of the best mares ever got by Baron's Pride. The champion male of the show was Mr. James Kilpatrick's Oyama, which won the Cawdor Cup two months ago at the Stallion Show. His sire was Mr. Marshall's Baronson, another son of Baron's Pride. In competition for the Clydesdale Horse Society's Medal, the filly, Minnewawa, beat the colt, Oyama. The other special feature of the show was the extraordinary success in the female classes of Mr. I. Ernest Kerr's first-class stud at Harviestown, Dollar. Mr. Kerr won first prize in every female class, except that in which Minnewawa won, and there he was second with Delicia, by Baron's Pride, out of Princess Beautiful. He was first with the brood mare Rosedew, by Baron's Pride, out of Queen of the Roses; with the yeld mare Pyrene, by Baron's Pride; with the three-year-old Veronique, by Montrave Ronald, and with the yearling filly Marilla, by Baron's Pride. This was an extraordinary day's work, and the victories were not "flukey." The classes were strong in numbers and quality, and it was not easy to win in them. In the male classes, first prizes went to the same tribe. Oyama has already been referred to. The first-prize three-year-old was Mr. Marshall's Memento, winner of the Brydon 100-gs. Challenge Shield this year, and got by Baden Powell, a son of Sir Everard, and his granddaughter, a mare by Baron's Pride. The first yearling colt was Mr. I. P. Sleight's son of Everlasting, which won at Aberdeen, in March. The ascendancy of this Sir Everard tribe is as complete at present as ever was the ascendancy of the Prince of Wales or Darley tribes in their day.

"SCOTLAND YET."

A Farmers' Produce Company.

Editor "The Farmer's Advocate":

The Kent Farmers' Produce Company, of Blenheim, situated almost in the heart of the bean-growing district of Southern Kent, has become of great value to the farmers of the locality. It was started about two years ago by farmers (being the outcome of combine of bean merchants), and being a new business to them, they had some difficulty in getting everything in connection with business to work right, but now, with experience, and with their efficient manager, Mr. J. A. Cameron, fair prices can be obtained by farmers for their produce, and at no time can other buyers force down the prices for their own gain.

A half-yearly report of their transactions showed a profit of \$2,650. This was valuable to the company, as but little difficulty was experienced in adding \$1,500 to their stock. Heretofore the company has been handicapped for sufficient means to carry on a cash business, and directors had to give personal notes to the bank for same. At the present rate of progress the directors not only will soon be freed from giving their notes, but will be remunerated by a fair salary for their labors.

D. C.

New Arrivals.

The Dominion Government has issued its report on immigration for the fiscal year ending June 30th, 1905, according to which the year previous was by far the most notable, from the standpoint of immigration, of any in history.

The total number of arrivals in Canada was 146,266—the largest on record. Of these, 98,902, or more than two-thirds of the total arrivals, came either from Great Britain or the United States.

The arrivals from Great Britain during the past year amounted to 53,859—an increase of 14,985 over the preceding twelve months.

The American movement to Canada showed a slight falling off last year, though it is still very large, and the result of the immigration policy across the line, highly satisfactory.

Twelfth Annual Canadian Horse Show

"I have great pleasure in declaring the Twelfth Annual Canadian Horse Show open, and I wish it every success," was the model speech with which H.R.H. Prince Arthur of Connaught formally opened the combined horse and society event, in the Toronto Armories, on Wednesday, April 25th. The exhibition actually commenced Tuesday evening, and lasted until Saturday night. Except for a slightly smaller entry, perhaps better distributed, it did not differ much from that of last year. Magnificent display of horses on the line, under saddle, in heavy leather, and in light driving equipage—the spirited Thoroughbred, the dashing Standard-bred trotter and pacer, and the proud-stepping Hackney—all were there, while, by way of variety, the heavy-drafters, single, double and four-in-hand, the polo ponies, the hurdle performers, and the miscellaneous classes—all displayed on a noiseless tanbark footing in a large ring, before a galaxy of richly-dressed people and a bevy of silk-hatted, frock-coated judges, with intermittent music by a military band, which helps to put additional snap into already spirited horses—that, in a few words, is the Canadian Horse Show.

There are two ends to it. There is the breeder's part, consisting of classes of registered stallions and mares, shown mostly on the leading rein. Most of these classes were judged in the forenoon. The more spectacular exhibitions of saddle and driving horses (in many cases the result of previous importations of purebreds by enterprising horsemen) are principally reserved for the afternoons and evenings. This draws the patronage of Fashion. It is well that the two should go together as they do. Better that Society should spend its substance on horses than on automobiles. Shows of this kind help to create interest in horses, and are, at the same time, an educator to our breeders. We learn what is wanted, and get in touch with the people who put up the price. There is in the horse show possibility of great good.

It is regrettable, therefore, that there should have been a tendency to a falling off in the attendance after the first day, as compared with previous years. Of farmers and breeders there were, of course, but a handful, but even the city people seemed to lose interest in their high-priced boxes, and absented themselves in numbers. This was probably due to a lack of vim, to the absence of new features, and to a barely-sustained standard of excellence. Unless an institution of this sort is improving, it is virtually going back. Now, there must be a reason for the apparent waning of interest by exhibitors, and, finding none on the surface, we are constrained to enquire more closely. It is openly hinted that the fault lies at the door of the management. The show has been held under the joint auspices of the Canadian Horse-breeders' Association and the Toronto Hunt. The former body has been practically controlled by a number of professional dealers and exhibitors, together with some merchants and other city men who own some horses, but can scarcely be called breeders in the commonly-accepted sense of the term. On the joint committee of management are ten men representing the so-called Breeders' Association. Of these, only two are really representative breeders. In the absence of more adequate representation, it is openly hinted by the rank and file that wire-pulling has been done in securing the appointment of judges, and that the average breeder who exhibits there must count on bucking against odds. Whatever the truth, or otherwise, of the insinuation, this growing feeling is responsible for a marked alienation of sympathy throughout the country. Hon. Nelson Monteith, Minister of Agriculture for Ontario, tired of the importunity of certain men assuming to represent the horse interests of the Province, has made provision in the amended Agriculture and Arts Act for divorcing the breeders and the professional horsemen, so far as organization is concerned, and henceforth the Government's grant will be made to a bona-fide breeders' association who will devote their effort to improving the spring stallion show, offering prizes, doubtless, for stallions of the light as well as the heavy breeds, and the horsemen may then run the society affair as they like. It is probable that the spring stallion show will thus detract somewhat from the other, and unless some radical departures are insisted upon in the conduct of the Canadian Annual, it seems likely to lose most of its interest for the majority of our readers.

Judges.—The judges were: Thoroughbreds, Dr. J. G. Rutherford, Ottawa. Standard-bred trotters and pacers, Dr. Sinclair, Cannington, and Robert Graham, Toronto. Hackneys, Thos. Bell, Chicago, and Lancelot Strother, Toronto. Harness Horses, R. F. Carman and G. B. Hulme, New York. Saddle Horses and Hunters, Alfred B. MacLay, New York, and W. A. McGibbon, New York. Polo Ponies, Seward Carey, Buffalo, N. Y. Delivery Wagons, R. F. Carman and Dr. Sinclair. Ponies, H. M. Robinson and Robert Graham. A hitch occurred in securing the Hackney judge. It was intended to have Mr. Galbraith, but a delay occurred in the transmission of correspondence, and late in the day it was found that he could not attend. It was next proposed to secure Hildreth Bloodgood, of New York, but again the management were disappointed.

THOROUGHBREDS.—Taking the classes in order as catalogued, Thoroughbreds come first. Aged stallions brought out last year's champion, Robt. Davies' Orme Shore, to repeat his triumph. Next to him was placed Dr. Andrew Smith's Kapanga Horse, and third fell to Davies on Balsover, half-brother to Orme Shore through his sire, Orme. In stallions foaled subsequent to Jan., 1903, the red ribbon went to Rigolo, a fairly good

16-hands brown, by old Dalmoor, which later had to be content with fourth or reserve position in the section for Thoroughbreds calculated to improve the breed of saddle horses and hunters. First in this latter class was awarded to Davies' imported chestnut, Ails d'Or, by Melton. The same horse was reserve to Orme Shore for championship honors.

STANDARD-BREDS AND ROADSTERS.—Some changes were noticed in the Standard-bred rings, as compared with last year. For first in the senior trot-

the red for Miss Wilks in the junior trotting class. Mograzia is a colt of excellent promise, and we understand it is purposed to retain him in the stud. Cruickston, by the same sire, stood third in this class, John Gentles, of Brantford, dividing these two with his Steel-Arch colt, Steel Brand. Arbuteskan, by Arbutus, is the bay horse with which H. H. James, of Hamilton, headed the string of pacing stallions, the blue decorating another Steel-Arch colt belonging to Hunt & Colter, Brantford. Stroud Boy, sire Harry Wilkes, owner, C. H. Anderson, Toronto, was third, and the bay, Joe Gothard, exhibited by J. Stwarts, of St. Catharines, reserve.

In the Roadster classes, for mares or geldings, Miss Wilks had the pick of the rings, getting first on Lady Cresceus for trotting mare or gelding not exceeding 15.2; first for Rhea W. in the trotting class under 15.2; and first for Dossie Wood in pacing mares or geldings not over 15.2.

The champion roadster, trotter or pacer was Rhea W., reserve being Lady Cresceus.

HACKNEYS.—Of the Hackney judging complaints were numerous and loud, but the strongest indignation was aroused over the disqualification of On Guard, the black chestnut, foaled 1902, imported and shown by R. Beith, Bowmanville. On Guard is a magnificent Hackney, well-nigh faultless in type, with high, true, level and extensive action and a proud carriage, unquestionably entitled to first place. But the judges had evidently picked upon Rosary, the grand champion at Toronto last fall, a well-fashioned, well-mannered horse, with lots of quality, imported by Graham Bros., and sold to H. J. Spenceley, Box Grove, by whom he was entered. Unable, however, to put him above his competitor, the judges called in Dr. Stewart to subject the Beith horse to a



Sovereign Hero.

Bay gelding, second in class for green horses in harness, over 15.2 hands, at the Canadian Horse Show, 1906. Sold to Graham Renfrew Co., Bedford Park, Ont., three weeks prior to the show, by H. J. Spenceley, Box Grove, Ont.

ting stallion class, H. C. Stinson, of Brantford, exhibited the chestnut, Beau Ideal, by Dare Devil, a good-looking kind as to conformation, while the blue or second ribbon decked a Mambrino-King get, Lord of the Manor, entered by Geo. W. Kennedy, of Ilderton, leaving Miss K. L. Wilks, of Cruickston Park Farm, Galt, to be content with the white on Oro Dell. A right good sort is Mograzia, a 15.3-hands foal of 1903, got by Moko; and out of Congrazia (2.19), which captured

level and extensive action and a proud carriage, unquestionably entitled to first place. But the judges had evidently picked upon Rosary, the grand champion at Toronto last fall, a well-fashioned, well-mannered horse, with lots of quality, imported by Graham Bros., and sold to H. J. Spenceley, Box Grove, by whom he was entered. Unable, however, to put him above his competitor, the judges called in Dr. Stewart to subject the Beith horse to a



Rosary (imp.) Vol. 2 (8617).

Champion Hackney stallion at the Canadian Horse Show, 1906. Also at the Toronto Industrial, 1905. Imported by Graham Bros., Claremont. Now owned by H. J. Spenceley, Box Grove, Ont.

veterinary examination, with the result that the latter was quickly given the gate, on the score of defective wind. None of the other entries were examined. As On Guard had been pronounced sound by two veterinarians in the Old Country, and in the ring exhibited no suspicious symptoms discernible to the ringside talent, a number of horsemen requested that he be examined after leaving the ring. Dr. H. Van Zant was engaged, and pronounced him sound in every respect. Another verdict of soundness has since been rendered by one of the best veterinarians in the region of Bowmanville. Disgusted with the treatment received, Mr. Beith withdrew all his horses after this class and shipped them back home. The bugle called out Rosary first; Hunmanby Duke, a Beith entry, second; and O. Sorby's Garton-Duke-of-Connaught get, Warwick Model, third. Warwick Model is a right good sort in conformation, quality and action, and would have done no discredit to the red colors. Hunmanby Duke is a strong, 16-hands bay, also got by Garton Duke of Connaught. He has great bone, scale and substance, though not superlative action. Reserve was a promising young chestnut foal of 1902. Samuel Smiles, imported and exhibited by J. B. Hogate, Weston. He came into the ring practically green, but in subsequent appearances improved wonderfully in manners and action. Well modelled and spirited, he has a grand, true, remarkably level way of going. Already he will take a lot of beating, and, with schooling, will be one to be conjured with in future rings. In the junior stallion class, Beith had this his own way, getting first on the imported Cedar-go-Bang, a Garton-Duke-of-Connaught colt, and second on Nether Hall, by Norbury Lightning. There are at this show two sweepstakes classes, identical, so far as qualifications are concerned. Rosary was awarded the honor in both cases, with Samuel Smiles reserve, though, by the second showing for sweepstakes, the latter had improved sufficiently to have almost warranted a reversal of the earlier decision.

In a good class of eight mares, first went to the noted Miss Baker, exhibited by Sorby, second to Beith's Balcary, by Norbury Lightning, and reserve to Londeborough Lady, the imported chestnut, also from the Waverly Stock Farm.

The open breed competition for high-stepping registered stallions resulted in a victory for Crow & Murray's Standard-bred, Honor Bright. Second went to Royal Salute, same breed and exhibitor, and third to the Beith-bred Vanguard, exhibited by A. G. H. Luxton, Milton West.

In stallions any age or breed, calculated to produce carriage horses, the first three places were taken by Hackneys, in the order named: Warwick Model (Sorby); The Black Doctor (W. R. Lowes & Co., Brampton), and Samuel Smiles (Hogate).

The usual excellent display of heavy-leather and saddle horses was made by about the same run of exhibitors. Hon. and Mrs. Adam Beck, of London; A. Yeager, of Simcoe; Miss K. L. Wilks, of Galt; Crow & Murray, Geo. Pepper, Jos. Kilgour, Dr. W. A. Young, Alf. Rogers and G. W. Beardmore, of Toronto; Gordon J. Henderson, of Hamilton; E. H. Weatherbee, of New York, and others, were out with capital strings, and mixed things up pretty well. A large proportion of the harness horses were the get of Yeager's Hackney stallion, Hillhurst Sensation. Among them may be mentioned an almost perfect bay gelding, Sovereign Hero, purchased about three weeks ago by Graham, Renfrew Co., Bedford Park, from H. J. Spenceley, Box Grove. Sovereign Hero came into the ring quite green, but was good enough to climb into second money in the class for green horses in harness over 15.2. We believe Mr. Graham has protested the decision, and expects to be accorded first. We understand that \$2,000 has been refused for this colt, which was picked up as a sucker in a farmer's barnyard. It shows the money there is in breeding to a first-class Hackney sire.

In ponies, Graham, Renfrew Co., had a rare good piece of Hackney excellence done up in a small parcel in their imported three-year-old bay, Plymouth Horace. He was an easy first in the stallion class, and also the champion pony in harness, under saddle or on the line, not exceeding 14 hands 1 inch.

DRAFT HORSES.—Clydesdales had everything to themselves in the heavy drafts. Some ten or eleven grand mares and geldings pulled out in the several classes, not a bad one among the bunch. In pairs, the Dominion Transport Co. got first on their massive, highly-fitted team, Charlie, sire Royal Huntly (imp.), and Bobby Burns, sire Macarlie. Second was found in O. Sorby's team, Miss Charming, by Lord Charming, and Lady Calista, sire Exquisite. After these came the remaining entry of the Dominion Transport Co. for third, and for reserve a pair of imported pure-bred mares, Lady Sally and Miss Wilson, belonging to Smith & Richardson, of Columbus. They are a strong-boned pair, of the right type, and with a little more beef on their middlepieces would have shown to better advantage. In singles, the Dominion Transport Co. got first and second, and Sorby third on Miss Charming.

Reliable Reports.

I send you one dollar and a half for the renewal of "The Farmer's Advocate" paper till 1907. It is a grand paper for the farmer. The markets are certainly correct. I take two other papers, but I depend on "The Farmer's Advocate" for the market reports.
Haldimand, Ont. LEONARD MILLER.

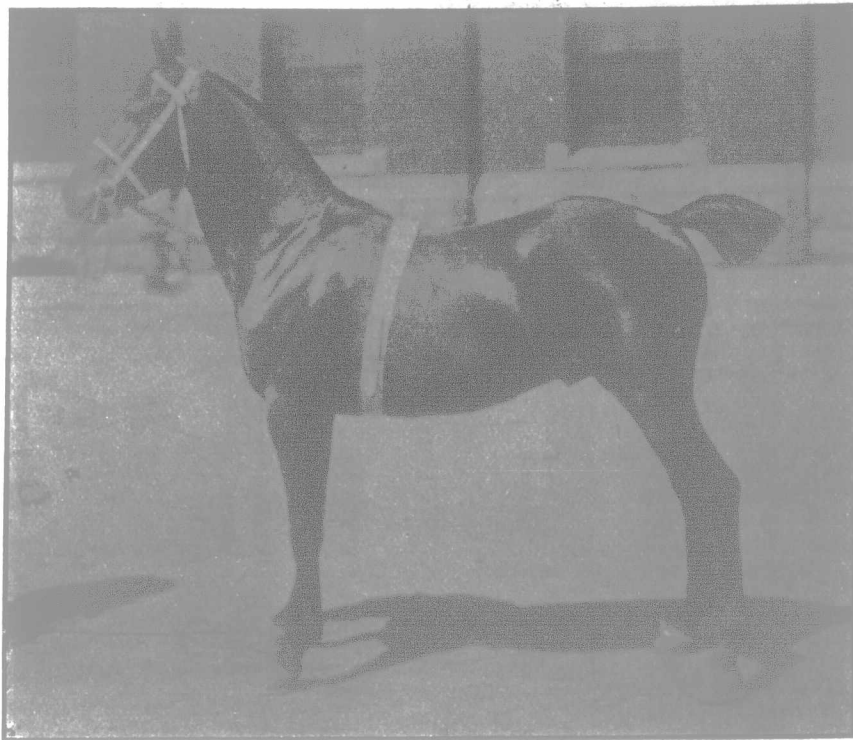
Ontario Vegetable Outlook.

Reports received by the Ontario Vegetable-growers' Association from comparatively widely-scattered sections throughout Ontario, state that it is yet too early to predict what the vegetable crop is likely to amount to this year, but it is probable there will be a considerable increase in acreage in most of the leading varieties of vegetables. The reports show that the crops in the greenhouses are in excellent condition, and that the supply of early vegetables will be larger than usual. Reports from Ottawa, Toronto, Leamington, and one

East Prince, P. E. I.

The fodder has held out well, and unless we have a very late spring there will be enough and to spare. The grass roots are very much hoed out, by so much thawing and freezing, and I fear that the clover in the center of the fields, at least, will be badly killed. We are not likely to have an early spring by present appearances. A great many people judge the weather by the moon. The rub is, that the three last days of the old moon governs the three first weeks of the new. I have watched the old sign now for years, and have scarcely known it to fail.

This has been a great winter for spreading manure broadcast—no freshets to wash the manure away, therefore the soil will get the full benefit. There are a great number of manure spreaders on the market. These, we believe, are an excellent article, but they cannot be used in winter; but those who have good manure sheds, and take proper care of their manure during winter, not allowing it to heat and firefang, find the use of a manure spreader in the month of May as good a way and time as any to apply manure. The only advantage I can see in winter manuring is that it saves work during the busy spring season. There were some very choice beef cattle bought by the Charlottetown butchers for the Easter trade. The dressed carcass of the heaviest steer weighed 1,257 pounds. This animal dressed 66 per cent. to his live weight. Six carcasses totalled 5,384 pounds, making an average of nearly 900 pounds each. Such cattle as these are a credit to the Province, and, in fact, would be hard to beat in any part of Canada. I hope to see some reports in "The Farmer's Advocate" of the Easter beef in different parts of Canada, for I would like to know



Plymouth Horace (imp.) —305—

First-prize Pony stallion, and champion Pony in harness, under saddle or on the line, at the Canadian Horse Show, 1906. Exhibited by Graham, Renfrew Co., Bedford Park, Ont.

or two smaller points, show that there has been a large number of new greenhouses constructed since last fall. One correspondent near Toronto states that over 10,000 feet of glass has been erected in his vicinity, most of which has been used growing lettuce. The Association has been unable to secure reports from the canning sections, so it is impossible to state what the probable acreage for canning purposes will be.

how far the other Provinces of Canada are ahead of our little Island Province in this branch of farming industry. The heaviest steer was a grade Shorthorn, four years old.

It would be interesting to know just how much it cost to produce this beef. Some stockmen have been advocating for to have a fat-stock show for the Island, to be held in Charlottetown just before Easter. This would give farmers and others a chance to see what could be done along this branch of farming. Everyone cannot raise beef as good as this, but almost every farmer can raise pork, and make money at it, or should be able to at 8½ cents per pound. Young pigs are very scarce again this spring, and on account of the very high price of pork they will be expensive to buy; but now is the time to have pigs, and lots of them, with thousands and thousands of bushels of potatoes in our cellars, and the market at present for them is not at all encouraging.

We are asked by Mr. Wm. Blue, who wrote an article on bean-growing, published April 5th, to state that his county is Kent, not Elgin. The statement occurred through following the Canadian Almanac, which gives the electoral district in which each post office is situated. In a few cases the electoral districts do not conform to county boundaries, and in this way occasional errors have occurred.



Mograzia.

First-prize roadster trotting stallion foaled subsequent to January, 1903, at the Canadian Horse Show, Toronto, 1906. Exhibited by Miss K. L. Wilks, Cruickston Park Farm, Galt, Ont.

Hay is about \$8 pressed, and straw, \$5; home-grown timothy seed, \$2.50 per bush. Oats for seed are 40c.; for feeding, 38c. Wheat is worth 70c. to 80c.; reclaimed for seed, \$1 per bushel. Roller flour, \$2.25 per hundred. Eggs are about 12c. per dozen.

A good deal of lumber is being hauled to the saw-mills this winter and spring, and the hum of the saw can be heard all day long. Ordinary rough boards are worth \$1 per hundred feet.

A lot of horses are changing hands; \$150 to \$200 is being paid for some good ones. Prince Edward Island has some very fine stallions of almost all breeds, and those who own a good one will likely get all the patronage he needs. Horses pay; let us raise plenty of them.
C. C. O.

Wire Fencing—Anchor Posts—Feed Rack.

Editor "The Farmer's Advocate":

There is a great difference of opinion with regard to the ready-made wire fences, but if a man wants to save all the money he can by putting up his own fence, he can do so in this way. Take ten No. 9 line wires, and a barb wire in the bottom (to stop the pigs), eleven wires in all, for line wires 4 1/2 feet high. Place posts 25 feet apart. Now put on slats of wood every 5 feet, which will stiffen the fence and make it all right for horses or cattle. If for pigs also, put on a wire every foot or foot and a half between the slats, and you have as good an all-round fence as is made.

A word about anchor posts. Take two scantling 3 1/2 feet long; make a mortise in each side of the post, 2 inches from bottom end, and about 1/2 inch to 1 inch deep, for the scantling. Spike them on with 5-inch spikes, one scantling on each side of post. Now dig a hole 2 feet by 4 feet, the depth you want the post in the ground, or, about 3 feet deep, we will say, with the 4-foot length across the fence. Dig a little hole for the end of post to fit down in, and place the post in position, with the scantling crosswise to the fence. Now fill in level with the top of the scantling, but no higher, pounding down the earth with a punch made as follows: Take a round pole 4 or 4 1/2 feet long and 4 inches thick; bore a hole 6 inches from top end, put a pin through, leaving a hand hold on each side. Saw enough boards 2 feet long to cover the scantling crosswise. Now put a board 3 1/2 feet long on each side, and your platform is complete. Put in about 3 or 4 inches of dirt at a time, and pound it down solid with the punch, and you cannot draw them out. The fence I describe, you will see, is a combination of what we call the "Slat" fence and the "Gem." We make the spaces as follows between line wires, beginning at bottom: 3, 3, 3 1/2, 4, 4, 5, 6, 7, 9, 9 1/2 inches.

A very handy feed rack for cattle is made as follows: Take four posts 5 inches square and 5 feet long. Saw boards 4 feet long for ends, and 14 feet long for sides. Now nail the boards on the posts, with a post in each corner, to a height of 24 or 28 inches, then leave a space 2 feet without boards, and put a board all around the top. Take a 5-foot plank and nail up each side in center, with a brace across at top and bottom to strengthen the sides, and it is ready for use. The cattle cannot get into it, and I have seen fourteen cattle—without horns, of course—eating in ours at once. It is not suitable for horses, as they rub their manes out on the top boards.

R. O.

Special Prizes at International Exhibition.

Editor "The Farmer's Advocate":

Rosenbaum Bros. & Co., of the Union Stock-yards, Chicago, offer special prizes annually, to be competed for at the International Live-stock Exposition, to the breeders and feeders in the different States, an additional incentive to add further lustre to their achievements, by bringing about a competition between State breeders. They offer to the State which sends to the International animals that win:

- 1st—The greatest number of points.....\$500 00
- 2nd—2nd greatest number of points..... 300 00
- 3rd—3rd greatest number of points..... 200 00

These winnings are then to be turned over to the Animal Husbandry Department of the Agricultural College of the State winning as an appreciation of the improved work that is being accomplished by the agricultural colleges in the education of farmers' sons in the science and practice of field tillage, the growing and care of crops, and the science of breeding and art of feeding, directing the experiment stations receiving the money to use it in paying prizes on live stock, or to successful students in judging live stock and grains, or to both, at the winter meetings, known as the "Farmers' Short Course in Agriculture," at the different agricultural colleges. The details governing the disposition of the premiums are to be arranged by the Dean and the Professor of Animal Industry, and the Professor of Agriculture at the college located in the successful State.

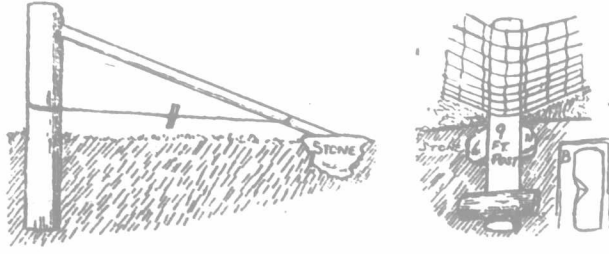
W. E. SKINNER, General Manager.

Note.—In reply to an enquiry whether the above prizes are open to Canadian competition, Mr. Skinner writes: "Rosenbaum Bros. are a firm of commission merchants doing business at the Union Stock-yards, Chicago. They receive a very large business from breeders and feeders of cattle in this country, and nothing from Canada, and while the show is international in every respect regarding its own premiums, we cannot insist upon its being international where the interests of special subscriptions are peculiar to any certain district."

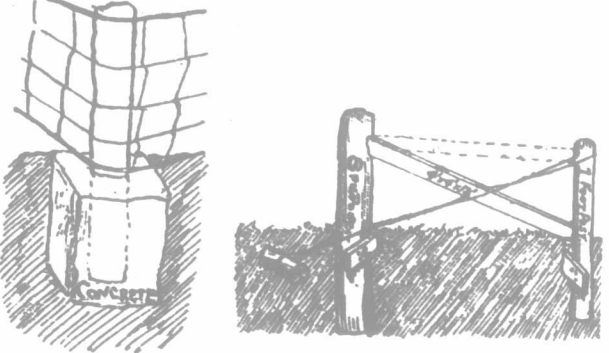
Mr. B. W. Chipman, of Halifax, for fifteen years past Secretary for Agriculture in Nova Scotia, died on April 24th, at the age of 70 years.

Wire Fences and Anchor Posts.

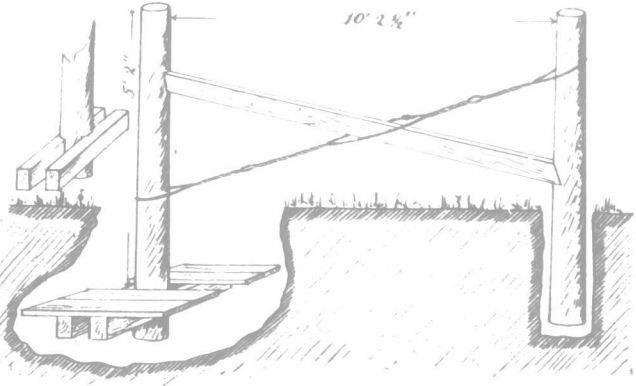
Wire fencing is fast taking the place of rail or board fence on the farms of older Canada, and wire is prac-



tically the only fence used in the Prairie Provinces. As this is the season in which the bulk of farm fencing is built, we publish illustrations of several styles of fencing and of anchoring posts, which may serve as



guides for those contemplating the use of this class of fence. We are not sure that these are the best possible, and for this reason, among others, we invite



farmers to give "The Farmer's Advocate" readers, through the medium of our columns, the benefit of their experience and observation in the erection of wire fencing of approved style.

Professor of Entomology at O. A. C.

Rev. Dr. C. J. S. Bethune, of London, the widely-known editor of the Canadian Entomologist, and Librarian and Curator of the Entomological Society of Ontario, has been appointed Professor of Entomology at the Ontario Agricultural College, Guelph, as successor of Prof. Franklin Sherman, who recently resigned to return to North Carolina. In Dr. Bethune



Rev. Dr. C. J. S. Bethune.

the College has added to its staff one who ranks easily as one of the most eminent scientists of the day. His appointment dates from June 1st. It is not unlikely that Dr. Bethune's removal to the Agricultural College may also result in the transfer of the Entomological Society's splendid library and collection to the College, where it would be of great service to the students.

J. E. Howitt, of Guelph, who graduated from the O. A. C. last spring, and is now taking post-graduate work at Cornell University, has been appointed demonstrator in biology, succeeding V. W. Jackson, who has received an appointment in New Zealand, to introduce nature-study and agriculture into the schools of that colony.

Sale of Shorthorn Cattle at North Bay.

A sale of pure-bred Shorthorn cattle was held at North Bay, Ont., April 26th, under the auspices of the Agricultural Society of the Township of Widdifield, aided by the Live-stock Branch of the Dominion Department of Agriculture, which bore the expenses. The offerings consisted of seventeen bulls and seven cows and heifers. The animals were contributed by Messrs. Burrell, of Greenwood; Smith, of Columbus; Miller, of Stouffville, and other Ontario breeders. The Superintendent of the sale was Mr. John Bright, of Myrtle, Ont., and the auctioneer was Mr. George Jackson, of Port Perry. The competition for the bulls was keen until about a dozen head had been disposed of, when most of the intending buyers were satisfied. The prices up to this time ran from \$60 to \$95 per head, the remaining animals going at about \$50 per head. The females were not eagerly sought, although they were good individuals of popular families. These brought an average price of \$66 per head. At the opening of the sale, addresses on the value of the use of improved sires in stock-breeding, the history of the co-operative sale system in Canada, and the outlook in beef-cattle raising were delivered by Messrs. J. B. Spencer, Acting Live-stock Commissioner; C. M. McRae, of the Live-stock Branch, Ottawa; Mr. John Bright, and A. E. Browning, President of the Widdifield Agricultural Society.

Fair Dates for 1906.

Canadian Horse Show, Toronto.....	April 25-28
Alberta Stallion and Foal Show, Calgary.....	May 7-8
Fat-stock Show, Calgary.....	May 8-10
Montreal Horse Show.....	May 9-12
Winnipeg Horse Show.....	May 23-25
Brantford Horse Show.....	May 24-26
Galt, Ontario, Horse Show.....	May 31-June 1
Toronto Open-air Horse Show.....	July 2
Inter-Western Exhibition, Calgary.....	July 10-12
Winnipeg Industrial Exhibition.....	July 23-28
Brandon Exhibition.....	July 31-Aug. 3
Cobourg Horse Show.....	Aug. 14-16
Canadian National, Toronto.....	Aug. 27-Sept. 6
Canada Central, Ottawa.....	Sept. 7-15
Western Fair, London.....	Sept. 7-15
New York State, Syracuse.....	Sept. 10-15
Michigan West, Grand Rapids.....	Sept. 10-14
Dominion Exhibition, Halifax, N. S.....	Sept. 20-Oct. 5
Prince Edward Island Agr. and Industrial Exhibition.....	Oct. 8-12
Ontario Winter Fair, Guelph.....	Dec. 10-15

Ontario Winter Fair, 1906.

Editor "The Farmer's Advocate":

The next Ontario Provincial Winter Fair will be held at Guelph, December 10th to 14th, 1906. The following are some interesting facts regarding the last fair:

Number of entries.....	5017
Cash prizes paid by cheque.....	\$7739.75
Special cash prizes paid by order on contributor.....	505.00
Special prizes other than cash.....	770.00
Passes issued to members of Farmers' Institutes and Live-stock Associations.....	5000

The practical lectures are most important features of the Fair; a total of 25 lectures were delivered at the different morning, afternoon and evening sessions.

These are figures which will be difficult to exceed, but we hope to make the next Fair of greater value to the farmers of Ontario than any yet held. As success in the past has been due in a large measure to the generous assistance given by the press, we trust this educational movement will continue to receive your goodwill and support.

A. P. WESTERVELT, Secretary.

Earnings on a P. E. Island Farm.

Editor "The Farmer's Advocate":

For the year 1903 the total receipts from our farm of 148 acres, 110 acres being under cultivation, was \$1,386.00, and for the year 1904 about \$1,100.00; while last year I feel sure the receipt fell off two hundred more, but this year I hope to be able to report a successful year's work. I may also state that the work on the farm is almost entirely done by my father and myself—father being now in his 64th year. The wages paid out for farm labor each year does not exceed \$25. We aim to plan our work to the extent that we can do it within ourselves, for the reason that hired help is almost impossible to get, and what is available is of a very unsatisfactory character.

I gave you a short time ago our crop rotation. It is our practice to manure all land before seeding out to hay, part with roots and part top-dressing on grain that is seeded out. We manure 12 to 15 acres per year with stable manure; we also use considerable commercial fertilizer, and consider it pays well. Prince Co., P.E.I. COLIN C. CRAIG.

MARKETS.

Toronto. LIVE STOCK.

Receipts of cattle at the Toronto and Junction markets during the past week amounted to 2,850 all told.

Export Cattle—Finished cattle sold at about steady prices, but medium cattle were slow sale at lower quotations.

Butchers—Receipts of butchers' cattle have been equal to the demand. Prices have ruled steady at last week's quotations.

Feeders and Stockers—Receipts have been light, but equal to all requirements. There is a fair demand for short-keep feeders.

Milk Cows—Few cows have been offered, and none of prime quality. Not enough choice-quality cows to supply the demand.

Veal Calves—About 2,200 calves came on the Toronto Market since a week ago. The bulk were from the dairy districts.

Sheep and Lambs—Receipts have been light, 666 for the two markets, but prices are lower, as veal being plentiful.

Hogs—About 2,200 hogs came on the city and Junction markets, which was a decrease of 2,232 for the same week last year.

HORSES.

Last week being the date of the horse show, nearly everybody was talking horse. The demand for all classes is and has been good.

COUNTRY PRODUCE.

Butter—Wholesale dealers report receipts larger. The demand is steady with prices easier.

Cheese—Market steady; prices firm at 14c. for large, and 14 1/2c. for twins; new, 13c. to 13 1/2c.

Eggs—Receipts have been large with prices easy at 16c. per doz. for new-laid. Poultry—Deliveries are still light.

Potatoes—Deliveries by car lots have been equal to the demand, but prices are about 5c. per bag higher.

Baled Hay—Owing to bad roads, deliveries at country points have been light, and prices are higher at \$10 to \$10.50 for No. 1 timothy.

Beans—Hand-picked, \$1.65 to \$1.70;

THE CANADIAN BANK OF COMMERCE

Paid-up Capital, \$10,000,000. Reserve Fund, \$4,500,000

HEAD OFFICE, TORONTO

B. E. WALKER, General Manager ALEX. LAIRD, Asst. Gen'l Manager

BRANCHES THROUGHOUT CANADA, AND IN THE UNITED STATES AND ENGLAND

BANKING BY MAIL

Business may be transacted by mail with any branch of the Bank. Accounts may be opened, and deposits made or withdrawn by mail. Every attention is paid to out-of-town accounts.

prime quality, \$1.40 to \$1.45 per bush. Honey—\$1.25 to \$2 per doz. for combs.

BREADSTUFFS.

Flour—Ontario, 90 per cent. patents, \$3.05 bid for export; Manitoba, 90 per cent. patents, \$3.90 to \$4;

Wheat—Ontario fall, red and white offered at 80c., outside shipping points.

Oats—No. 2 white offered at 36 1/2c., outside, or 38 1/2c., on track, Toronto; No. 2, mixed, 35 1/2c. bid, at outside points.

FARMERS' MARKET. Dressed Hogs—Prices firm at \$9.50 to \$10 per cwt.

SEEDS. Prices unchanged. There is a good inquiry for seeds for farm purposes.

HIDES AND TALLOW.

E. T. Carter & Co., wholesale dealers in wool, etc., have been paying: Inspected hides, No. 1 steers, 11c.;

Buffalo.

Cattle—Prime steers, \$5.25 to \$5.65; shipping, \$4.65 to \$5.15; butchers', \$4.25 to \$5;

Chicago.

Cattle—Common to prime steers, \$4 to \$6.35; cows, \$3.25 to \$4.60; heifers, \$2.75 to \$5.25;

ers' weights, \$6.40 to \$6.50; good to choice, heavy, mixed, \$6.40 to \$6.45;

Montreal.

Cattle—The English market showed more strength last week. The Liverpool market for choicest Canadians advanced to 11 1/2c. and 12c. per lb.

Hogs—Market for hogs firmer, and prices scored a further advance. The English market was towards strength.

Horses—There is activity as a result of the approach of navigation, and horses are very firmly held.

Butter—The make of new butter is constantly increasing, and it is now greater than consumption.

Cheese—The English market for old Canadian cheese has experienced a decline, and this is having its effect upon the market for feeders.

Eggs—Price advanced. Merchants have started to pick the stock over, and to put away the selects in cold storage.

Maple Products—The market for maple syrup was about steady. Practically everything has been received from the country.

Dressed Hogs, Provisions, etc.—

Dressed hogs, 10c. to 10 1/2c. for fresh-killed, abattoir-dressed stock. Provisions of all kinds are very firm and slightly higher.

Grain—Oats, 39c. to 39 1/2c., store, for No. 4, 40c. to 40 1/2c. for No. 3, and 41c. to 41 1/2c. for No. 2.

Hides—Receipts of beef hides more liberal, but calf skins and lamb skins show little change.

Hay Seed—The demand for all kinds of hay seed is very active at present, generally merchants throughout the whole country laying in stocks for the demand from farmers.

Canadian stockmen, and especially breeders of Ayrshire cattle, will regret to learn of the death, on April 30th, of Mr. W. Watson Ogilvie, of Montreal.

HOMESEEKERS, ATTENTION—CHEAP RETURN RATES TO CANADIAN WEST.—The Canadian Pacific announce their annual Homeseekers' Excursions to all points in the Canadian Northwest.

Wait.

Keep still. When trouble is brewing, keep still. When slander is getting on his legs, keep still. When your feelings are hurt, keep still.



Life, Literature and Education.

That Old Schoolhouse!

An ex-teacher, to whom the profession has been exceedingly ungenial, remarked to us once, while passing a rural schoolhouse, that in such places she invariably turned her face in the opposite direction. Not sympathizing wholly with the motive of the little teacher's manifesto of dislike, we looked calmly at the offending object. It was one of the ordinary species, unadorned, oblong, end-to-the-road, looking not a little like a perforated packing-box with a peaked lid, or a decent dog-kennel, or a discarded Noah's Ark, or anything else one could imagine as especially bare, and uniform, and non-soul-inspiring. Moreover, it was set in the midst of a plot, treeless, shrubless, flowerless, its vacant spaces broken only by patches of thistles—as veritable a Sahara as one could imagine within the compass of a quarter, or a half, or three-quarters of an acre. As the last glimpse fled behind us, and we drove on, the next moment, into a pleasant wood, we thought that, were it for aesthetic reasons alone, the little teacher might be excused for turning her pink little face in some other direction. Were we ten years old, we thought, and going to that school, we should be tempted to "play hooky" a dozen times a day, over the fence and off into the cool wood, where sight and soul, and pleasant activity of hands and feet, might all find food and satisfaction.

And then we pictured before us, in endless procession, all the other little Saharas, about as treeless and thistle-patched and flower-minus as this one, strung at intervals of every three or four miles along our highways; and a feeling of pity came up for the teachers, and above all, for the children doomed to spend years of their lives in just such unattractive spots, usually without even the solace of the green wood over the fence, and sometimes with positive discomfort, even worse than inconvenience and ugliness of architecture, to put up with. "My schoolhouse is ugly," remarked a teacher to us not long ago, "but I think I could stand that if it were warm. My feet just freeze all winter long—and it's a new schoolhouse, too!"

Now, can it be that the lowest tender is at the bottom of all these difficulties?—that any kind of place at all which roofs in from the weather is considered good enough for the most important work of the land—the education of its rising men and women? If education means anything at all, should it not be conceded that at least buildings warm enough and convenient enough to preclude any hampering of the work, either of teacher or pupils, should be provided? And why is it necessary that schoolhouses in general should be of so uniformly forbidding an exterior? In the case of a mush-

room town like Cobalt, an edifice so sternly prison-like as that shown in our illustration may be excused, held up, even, for praise as an example of what energy may do in so new a district. But can the same sort of educational institution be considered worthy of our old, populous and wealthy farming districts, where a few dollars more spent in the erection of a better building would be scarcely missed from the pockets of the ratepayers? . . . It is universally conceded that wisely beautiful

three-quarters of a mile from Jordan Harbor, on Lake Ontario, without doubt the best equipped rural school in Canada, and one which may well stand as an inspiration to the ratepayers of every other section in the land.

This school building, through the generosity of Mr. Rittenhouse, now of Chicago, but formerly of the old stone school which once stood on the site of the present one, was built in 1890. It is comfortable, convenient, well lighted, heated and venti-

ed Schools, is to be introduced in the early future.

In addition to the schoolhouse, it may be added, there is also, for the use of the school, a separate building, containing the caretaker's residence, and a very fine hall for school concerts, lectures, etc., containing opera chairs, a piano, and a good projection lantern.

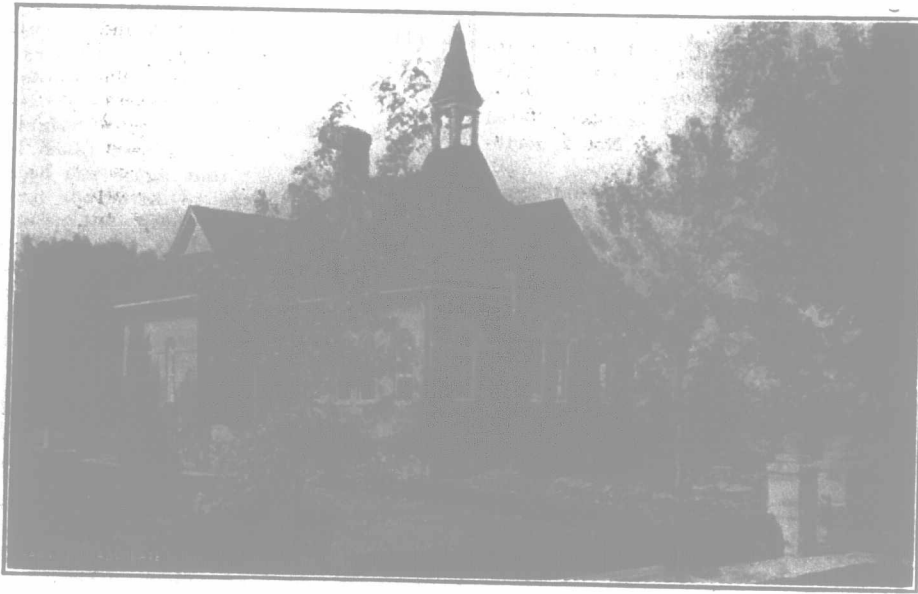
Now, since few sections can boast of a wealthy and liberal Mr. Rittenhouse, it is not to be expected, nor is it suggested, that all rural schools should, within any ordinary time, attain to such perfection as that which attends the Rittenhouse institution. The point is that every rural section which finds it necessary to erect a new schoolhouse should see to it that the new building is at least a little more comfortable, a little more convenient, a little more individual and agreeable to the eye, architecturally, than the orthodox Noah's Ark type.

We well know the enthusiasm with which the High School boy of today regards his "Alma Mater," and though we older "heads" may smile at his "Rah-rah-rah, Sis! Boom! Bah!" business, we cannot but commend his loyalty, that loyalty which is equally likely to make him fight for the honor of old Alma Mater on examination day. There is very little of this bubbling-over loyalty in our public schools. Who could wax enthusiastic over a Noah's Ark, or a packing-box? One might very well, however, imagine a "Rah-rah-rah! Sis! Boom! Bah!" war-cry, rung out with a right good will from the pupils of a school such as the Rittenhouse institution. Let us see more of the kind. Let us make it possible for the public-school child of our rural districts to be as bumptiously proud, as rampantly loyal to his public school as ever was college student of his Trinity or 'Varsity, and, if we mistake not, we shall see that better work will be done in such schools themselves, and better, brighter men and women turned out from them. Arbor day is here. We can't call up new school buildings by the "rubbing of a lamp," but we can at least begin at the school-yards, and, having made a good beginning, with flower-beds, tree-planting and flag-flying, evolution is likely to follow.

An Editorial that Touches the Right Spot.

A recent number of the Toronto Globe contains an editorial that merits the attention of everyone interested in the future of not only our Province, but our country. The subject was suggested by the recent educational convention held in Toronto, and the writer again brings up the question—old as Comenius and Pestalozzi, yet likely to be overlooked in this age of money-getting and graft—as to what education really should be.

Now, the casual observer of the working of our schools, must notice that, while conditions for the effective teaching of arithmetic, geography and history are being continually improved, while nature-study is being pushed and physiology made a feature, there seems to be no especial effort made to



The Rittenhouse Rural Public School, near Jordan Harbor, Ont.

surroundings help to make beautiful minds; that beautiful minds give rise to beautiful lives and kindly, refined manners. Are these things, then, of so small account?

In striking contrast with the Cobalt schoolhouse—which, we repeat again, we reproduce in no derision of Cobalt, but because the illustration happened to be handy, and is exactly typical of a multitude of other schoolhouses scattered throughout Canada in districts where there should be better—is the reproduction of the Rittenhouse rural school,

lated, and is supplied with everything a teacher can need to forward him in his work. The schoolroom is equipped with single desks, and its floor is covered with linoleum, and its walls hung with good pictures. In the southern wing is a library containing over 2,000 well-chosen volumes. The northern wing is used as a museum. The playgrounds are large, and the grounds to the front, as will be seen, beautiful with flowers, trees and shrubs. School-gardening, upon similar lines as that done in the Consolidat-



Cobalt School.

reach the deepest ethical need of the country.

True, in connection with physiology, the dangers of tobacco and intemperance are emphasized, but, as the Globe well says:

"What is the situation in Ontario at this moment? We are told, and told with frequency and emphasis, by the educational leaders that the political life of this Province is degenerate, its ideals low, its ethical standard 'not being found out.' Both political parties are charged with those forms of corruption that involve bribery, perjury, and all kinds of political chicanery. Election trials are pointed to as illustrating the utterly demoralized condition of the politics of this Province.

"The same is true in matters of trade. It is true that at this moment the cardinal and most damning evil in Canadian life is not drunkenness, or any of the vulgar and sensual immoralities of life, but dishonesty in personal character working itself out in dishonesty in trade. From that root spring plumbing knaveries, adulterations in jellies and jams, fraudulent apple-packing, shoddy goods, rake-offs, combine hold-ups, graft tolls, and all forms of industrial and business dishonesty."

Again we repeat, so far as the prevention of these less palpable, yet equally heinous, offences is concerned, there seems to be little done. Here and there, possibly, may be a teacher, so noble in character, so deeply conscious of the need of the developing man and woman, so conscientious in regard to bringing about the best development of these, that she will think herself of expedients whereby to set constantly before her pupils a high ideal, teaching them to scorn meanness, and trickery, and stepping on another man's neck to win personal gain, as poison of the soul. Yet, in the great majority of cases, where thoughtless, inexperienced boys and girls are in charge of schools, how often is this higher ideal worked towards? Let a pupil lie or cheat, he is, perhaps, promptly thrashed, and that is all there is to it.

The problem is truly a difficult one. To paraphrase such faults and teach them as one would definitions in geography, would scarcely recommend itself. Yet, one would think it a problem that should be met somehow. The conclusion of Pestalozzi that knowledge is not all, that "the thing was not that they should know what they did not know, but that they should behave as they did not behave," is as true in our day as in his; and now, too, as then, "the road to right action lies in right feeling." If the morale of our land is to be raised, if the rottenness is to be even reasonably purged from it, it is necessary to go a little further even than to pass local option and anti-cigarette by-laws, laudable as these movements undoubtedly are. It were well if the town in which local option and anti-cigarette principles obtain could say, also, that in it no man could be bribed for his vote.

Again, we repeat, the problem is a difficult one, one for the churches and for the press, and for our public men, but most of all for the home-makers and the educationists. There is danger of the best that is in us being swallowed up in the ever-widening vortex of commercialism. It is laudable and legitimate to make all the money one fairly and generously can, but there is a limit.

How is this problem to be solved? By resolutely and steadfastly making plain in every possible way in the home, in the school, in the church, in the press, and in public life, that character is a better thing, and in every way more to be desired, than the "Almighty Dollar." What can our educationists do to emphasize this?

In conclusion, we quote again from the editorial referred to: "Have the educationists anything to say touching this problem and how it may be met? Are the school and university, with all their equipment of laboratory and library, and with

their approved methods for sharpening the wits and making deft the fingers, doing their full share to secure legitimate exercise of these sharpened wits and honest workmanship from these clever fingers? Canada is just now at the parting of the ways. The enormous natural resources of this country and the new-found applications of scientific apparatus conspire to national greatness or to national collapse, according to the moral character of this generation of Canadians. Are truth and honor and consecration

or marred. What are their ethical ideals in education? What are their instruments of ethical culture? By what sanctions do they enforce the obligations of the ethical life?"

Empire Day in the Public Schools.

By a Successful Teacher.

It might be helpful to some of our teachers who have not any definite plan for inculcating or deepening the spirit of patriotism and loyalty to the great British Empire to hear how we in our class hope to enjoy the day, now so near.

During the first week in February we got out the map of the world, and each pupil chose a "little patch of red," which, as you all know, means a British possession. Hong Kong, Fiji Islands, Singapore, British Guiana, Orkney Islands, Aden, Cities in Hindustan, Channel Islands, St. Helena, Cyprus, Malta, etc., were among the places chosen, and for what? Well, each pupil wrote a letter to one of these places, requesting that it be answered in time to be read at our school entertainment on Empire Day. In our letters we described our city and surrounding district, our streets, municipal government, chief industries, public buildings, churches, schools (with particulars as to our own), Canadian seasons, sports for summer and winter, and any other things that we thought interesting, requesting our correspondents to reply in a similar way, as information of this kind from far-away Britons has been hailed with great delight in years past by other classes in our grade, some of whom are still carrying on a correspondence started in this way years ago. On Empire Day we shall have the map of the world before us, and trace the routes our various letters have come, and, by examining the post-marks, we see how long they have been on the way. By this means the children get a good practical knowledge of the leading trade routes of the world, the steamship lines and railways, etc.

Then, in mailing their letters, they become familiar with the postage

rates, many sending pictures and papers showing the produce sold in our markets and giving useful information of all sorts about our country.

Our entertainment is varied by the singing of patriotic songs, such as "Rule Britannia," "Britannia the Pride of the Ocean," "The Maple Leaf Forever," "Where the Sugar Maple Grows," etc.

We have had many delightful letters in past years, the children seeming to be highly gratified at being asked to describe their distant homes. All appear proud of claiming a part in the great Empire to which we belong, and many express love and admiration for our King and Queen, as well as loyalty to our Union Jack.

We address our letters "To the Principal of any English School," in whatever place to which we write, and enclose a note to him, asking that he give the enclosed letter to one of his pupils who will be sure to answer in good time.

It is too late now for this plan to be taken up this year by any of our rural school children that approve of the idea, but there is still time to get replies from every capital city in Canada. A letter from each Province would be a good beginning. The boys and girls have in this way, a good opportunity of exchanging stamps and curios, photographs, etc. Don't you like our plan for Empire Day? Try it, and you will be charmed with it.

GIGLAMPS.

Tell the Old, Old Story.

"A Day of Good Tidings," is the cheering title of a little book, penned amid the busy hours of business life by Mr. C. B. Keenleyside, B. A., B. D., who seized upon the familiar story of the four leprous men at the gates of famished Samaria when besieged by Benhadad, the Syrian king, to quicken again the faith and slumbering energies of the Christian Church, in living and spreading the message of the Cross. To further vivify his message, he has called to his aid the pencil of our friend Bengough on half a dozen pages, and, when coupled with his own graphic and incisive way of saying things, the result is indeed telling. In passing, we note he pays a well-deserved tribute to the undying missionary fervor and self-sacrifice of the Moravian Church, which sustains one foreign missionary for every 58 communicants in the home church, while the Protestant Churches of Canada support but one for every 2,500 communicants, who have infinitely more means at their individual disposal than ever the Moravians had. Like the other half-dozen stirring booklets Mr. Keenleyside has written, this latest one is replete with illustrations to sugar-coat his arsenal of facts. Wm. Briggs, Toronto, is the publisher.

Lost or Strayed.

Briton Riviere, through the several exhibitions in England and abroad, and through reproductions of his pictures in magazines, etc., is well known to all lovers of art, figure painting, alone or in groupings, in familiar scenes, being his specialty. In 1903 the writer stood amidst an admiring crowd of visitors in front of what the catalogue of the Royal Academy called a "Presentation Portrait," which faithfully portrayed, not only the Rev. Nevison Lorraine himself, but "his lurcher, Sirdar," the dog focussing our admiration. In "Lost or Strayed," the artist gives another study of dog-life, in which he has caught the agony of despair and loneliness when the poor doggie, confused by the ceaseless stream of vehicles, and the loss of all hope of finding either master or home, realizes that he is lost, and to be lost in London, whether you have two legs or four, means desolation indeed, for there is no loneliness like that of a crowd.

H. A. B.



Mr. F. M. Rittenhouse.

A native of Lincoln Co., Ont., now of Chicago, whose gifts of rural school and fruit experiment farm bespeak his generosity and foresight.

to right life being worked into the warp and woof of our young citizenship? Or are our young people left to infer that silver mines, and pulpwood, and wheatfields, and railways, are the things that make a nation, and make it great? The educationists, from the public school up to the university, stand at the strategic point, and by them more than by any other agency, the national life of Canada may be made



Briton Riviere, R. A.

Lost or Strayed.

News of the Day.

Canadian.

The Legislature of Alberta has made provision for the establishment of a Western University.

Mr. Andrew Carnegie has made a conditional donation of \$50,000 to Victoria College, Toronto.

In spite of President Roosevelt's courteous refusal of assistance, the Dominion Government is forwarding \$100,000 for the relief of San Francisco sufferers.

The degree of LL. D., has been conferred upon Mr. J. S. Willison, of the Toronto News, by Queen's University, Kingston. This honor he shares with Mr. Andrew Carnegie, of Skibo Castle, Scotland.

British and Foreign

Serious strikes are afoot in France, and riots are feared.

The Cliffe House, San Francisco, has only been badly damaged, not thrown into the sea, as was reported.

Dr. Doyen, the French scientist, announced at the Medical Congress, at Lisbon, that he has cured cancer by inoculating patients with yeast bacillus.

The Empress of China has sent \$70,000 for the relief of the suffering Chinese at San Francisco.

The towns of Santa Rosa and San

Jose, California, were completely ruined by the earthquake and the fires consequent upon it. In Santa Rosa the proportion of life lost was much greater than in San Francisco.

Notwithstanding the fact that people are leaving San Francisco as rapidly as possible, there are still many thousand homeless people camping as best they may about San Francisco. However, owing to the energetic measures taken by the sanitary corps, notwithstanding the fact that a heavy downpour of rain soaked tents, clothing and bedding, such as there were, there has been much less illness than was anticipated, and, thanks to the energetic measures immediately taken by the American people, no one has suffered from hunger. The exact loss of life will, perhaps, never be known. Over 300 bodies have been cremated by order, but, doubtless, a great many were incinerated during the burning of the city. The work of blowing up dangerous buildings has gone steadily on, and that of clearing away the debris has already begun, plans, even at this early date, having been set afoot for rebuilding the city on a grander scale than ever.

DEATH OF A FAMOUS SCIENTIST.

While the world stood aghast before the awful calamity at San Francisco, a tragedy, possibly of even greater moment to the world, occurred, comparatively unnoticed, in the streets of Paris. Subsequently, civilized peoples began to realize

that the dray wheels which, on the 23rd of April, crushed the life out of M. Pierre Curie, dealt to the welfare of mankind an irreparable loss.

It was in 1898 that Prof. Curie and his brilliantly clever wife, as a result of four years of deep study and continuous experiment, came upon the wonderful discovery that has since made them famous for all time. One can imagine the wonder, awe, almost terror, with which the two, in the "little, old-fashioned house at the extreme end of Paris," regarded the strange new substance, element or compound, as yet they scarcely knew which, and shining with a light that seemed almost of unearthly origin; and yet, with the caution and reserve of the truly great, for long enough, they said nothing about it. Not for nearly six years was the world permitted to become all agog over the miracle, radium.

From "The Farmer's Advocate" of Jan. 14th, 1904, we quote the following: "The newspapers still exploit the wonders of radium. Monsieur and Madame Curie, themselves, perhaps, little knew of the world-disturber which they were launching in the announcement of their discovery of radium. First, this substance appeared simply as a wondrous element, shining with a pale, glowing light that never diminished, sending forth heat that never lessened, and emitting rays whose activity burned the skin and blinded the eyes were not the utmost caution exercised. Edison began experiments with it, but, for the time, gave them up because of the danger of handling it. Astronomers

had their attention directed to it, and were led to look upon its presence in comets and the sun as a solution of the "pale luminosity," as Prof. Boyer calls it, of the one, and the age-continuing heat of the other. Medical men, too, began to look to it as a benefactor in surgery and medicine, and are making judicial experiments along these lines. As yet the price of radium is far beyond that of rubies. A single pound of it, pure, is to-day worth \$60,000,000. This tremendous value is due to the fact that tons and tons of pitchblende are required for the extraction of each pound, that the process is tedious and intricate, and that, so far, the only source of this pitchblende has been a certain spot in Bohemia, from which exports are now forbidden by the Austrian Government."

In this paragraph every tense should have been in the present. Today, in 1906, radium is still as great a mystery as ever; astronomers and medical men are still as interested in it; its value has not lessened.

Neither, indeed, has its manufacture greatly increased. Radium is too costly; its precise use is still too indefinite to create a demand for it in quantity. Yet its possibilities are recognized as enormous, and scientific men all over the world are wrestling with its problems.

Prof. Curie, the most interested, the most capable of these, has gone. His wife will, probably, still carry on her experiments in Paris, but what the world has lost by the removal of her co-partner in this work can never now be known.

The Quiet Hour.

The Power of Personal Touch.

And they brought young children to Him, that He should touch them.—S. Mark x. : 13.

A judge, who has had a great deal of experience in dealing with juvenile offenders, and has had wonderful success in putting them in the right path, says, "It is the personal touch that does it. I have often observed that if I sat on a high platform behind a high desk, such as we had in our city court, with the boy on the prisoner's bench, some distance away, my words had little effect on him, but if I could get close enough to him to put my hand on his head or shoulder, or my arm around him, in nearly every such case I could get his confidence."

How true that statement is—don't we all know how sacramental a touch is, how it can at times go straight to one's heart? On Good Friday, I was beside a friend in church. She is soon to undergo very serious operation, and as we sang:

"Peace, perfect peace, our future all unknown?
JESUS we know, and He is on the Throne.

Peace, perfect peace, death shadowing us and ours?
JESUS has vanquished death and all its powers—"

I, knowing that she was daily praying to be ready to "go or stay, as God might choose," laid my hand on hers for a moment. The next day I got a note beginning:

"Just a little word of 'thank you' for that touch of the hand yesterday—I am so thankful for you. It was good to be beside you in those hours."

No word or look can quite take the place of personal touch. How often we find this mentioned in our Lord's life. Though I have headed this with His touch of blessing on the heads of the little children, perhaps the tender touch which healed the poor leper was more suggestive as an example to us. That human heart, feeling intensely the natural shrinking away of its fellows from all contact with such a horrible disease, must have leaped up in wonderful response to that divinely-human touch.

More and more the world is awaking to the value of individuals, and to the necessity of dealing with them individually. Men and women everywhere are aroused as never before to realize the tie of brotherhood that binds together the whole human race. Though sceptics may say that this earth is so small and insignificant a part of the universe that it is inconceivable that the Son of God should give His life to ransom the race of men inhabiting it, yet we all know better than to really value things by their size. As Dean Hodges says, we know that, "after all, a man is better than a pile of stone, and that, though the stone were to be heaped so high that it reached the measure of the earth, still a living, breathing, thinking man is of more value, and that even if there were a hundred thousand or a million of such stupendous stone piles, as big, or a great deal bigger, hung in the sky, and shining there as suns and stars, yet, in comparison with them all, a man, with warm blood in his veins and good thoughts in his heart, is greater, and is naturally and of necessity more precious in the sight of God than the whole universe besides." One day, artificial distinctions will be swept away, and those who stand above their brethren as kings or princes will be those who have attained that position by right—the right of character. Don't you think that day is dawning more and more? Kings and emperors are already judged by their subjects, and no one is so exalted that he can afford to despise the mighty power of Public Opinion—and, for the most part, public opinion comes out strongly on the side of righteousness, and frowns on selfishness and wickedness. Our Lord's definition of greatness is accepted by mankind to-day; even those who do not bow to His authoritative statement consider that only one who serves his fellows greatly has any right to be called a great man. When attending a meeting of representatives of various "associated charities" lately, I was struck by the way they practically ignored Christianity—as far, at least, as any mention of it went—yet Christ's ideal of service was spurring them on to improve the condition of the poor in the neighborhood, and it seemed to be a matter of course that they should care for Lazarus at their gate. In one way that is a good symptom. It proves that the public ideal is higher than it used to be, and that rich people can no longer comfortably enjoy sumptuous living while a beggar is lying near them in hopeless wretchedness. But there is danger that philanthropic energy may

degenerate into machine-made charity. There is danger that wholesale improvement of "the masses" may usurp the place of tender ministry to individuals. Our Lord came to ransom "many," but how full of loving, individual ministry His life is, even to the very end—even on the Cross. And what a pleasure it is to enjoy personal ministrations to Him. Attention has been drawn to the act of the soldier who held a sponge filled with vinegar to His parched lips—using the means at his command to supply His need. We can all do something to minister to Him through His brethren. Shall we wait until we can give a great deal of money or time? Has He not asked for a cup of cold water? Organizations are very helpful and very necessary—unorganized help can never grapple with the terrible needs of crowded cities, but individual touch is needed too. Bishop Restarick warns us to be careful not to think that it is enough to give the cup of cold water through an organization only, lest it be too cold and should be dripped on the recipients as from the point of an icicle. The personal touch is more appreciated here than in the country, because it is unexpected. I have visited in hundreds of tenement-houses during the last four months, and in almost every case I have been thanked over and over again for coming—though I have given nothing but a little friendly interest. A five minutes' talk with a poor woman who can only speak a little broken English makes her feel that you are a real friend, and she greets you eagerly with a beaming smile the next time you meet. Stop at a street corner to say a bright word or two to the children as they come home from school, and they crowd about you in a moment, and cling to your arm—if they can get near enough—as though they had known you for years. I had a private chat with a little Jewish girl one evening, a chat in which we ventured beyond the limits of this world to the unseen land beyond the grave—and when she sees me now, she rushes to meet me with outstretched arms as though we had been life-long friends. City children don't seem to know the meaning of shyness, and they are full of bright friendliness and eager receptivity. How I wish I could talk about Christ to them, but that is against the rules of this "settlement" or "neighborhood" work. We can only approach them in a Christ-like spirit, and pray that the influence of Christian kindness may penetrate until they are ready for direct missionary teaching—we are trying to scatter invisible germs of Christianity.

You see the work in the city is much like the work in the country, everywhere we are dealing with "individuals," and here, as there, we must consider the needs of this particular man or woman, the hungry growing soul of that boy or girl. The rich man in the parable was not punished because he did not minister to a great many people, but because he was indifferent to the evident need of one beggar at his gate.

But to return to the question of the power of personal touch. A few days ago I saw our head settlement worker sitting in a tenement-house with a little Jewish child on her knee. The pretty curly head was pressed confidently against her shoulder, and the little dimpled hand was lifted and laid tenderly against my friend's cheek. Such a pretty picture! Even that mite of a child understood that a touch can often express love better than any words could do—and all our children are in love with "Teacher," which is not surprising, for she seems personally interested in each of them. I wish you could see how they rush to greet her on the street, and how ecstatically they welcome her when she has time to visit their homes.

In the "Love Watch" a beautiful picture is drawn of Martha of Bethany bathing the Master's feet when He returns from Jerusalem during the last week when she had the opportunity of ministering to Him in His own person. What a joy such ministrations must have been. Can we not share in it, ministering to Him in our homes or among our neighbors, rendering the little services which bring us into vital touch with Him and with them?

"Come, my beloved! we will haste and go
To those pale faces of our fellowmen!
Our loving hearts, burning with summer fire,
Will cast a glow upon their pallidness;
Our hands will help them, far as servants may—
Hands are Apostles still to saviour-hearts!"

HOPE.

Sometimes a hurry is the best thing. I am glad there are quiet and hurries. There always are two things. The world is all opposites, and one thing could not be without the other. You cannot rest until you're tired; you can't be glad if you've never been sorry. We shall be glad to see you and bye; and how He sees everything is good.

Children's Corner.

Mother Clucky.

"It's a fine, bright day, so, I think, I'll set Old Clucky," says mother, one fine afternoon in early spring; so off she sets for the barn, where Old Clucky has sat, quite contentedly, for the last two weeks on a lump of mud in the fond expectation that something would come from it.

Shortly after mother's visit, however, Clucky settles down with a contented chuckle on what she knows to be the "raal thing." There she sits for three long weeks, quietly brooding over all the bygone chicks she has reared, and the fat worms she has laboriously procured for them.

But one happy morning, the sun is shining brightly, and old General Rooster is crowing lustily among his flock of squabbling hens. Suddenly Old Clucky hears a crackling under her. She listens breathlessly. There! there is the long-looked-for sound, very faint and despairing: Cheep! Cheep! Another crackle, and yet another, and five little cheep! cheep! cheeps! are heard. Another day's wait and, perhaps, if all goes well, there are ten small chicks under Mother Clucky's downy wings.

"Yes, my dear," says mother, "ten young chicks this morning. All fine and fresh," and goes on with her baking to the thoughts of the profits the ten will bring her, while in a sunny corner of the barn-yard, Mother Clucky cackles triumphantly: "The first this season, and I've no doubt the finest of the summer."

LEITH.

In Slumber Land.

By Lloyd Aspinwall Freeman.

When prayers are over and good-nights said,
And little Tottie is put to bed,
And a loving and lingering somebody sips
A last sweet kiss from the dewy lips,
And, bending over the baby form,
Has tucked in the coverlets snug and warm,
Then Tottie can hear the muffled tread
Of the Sleep Man shuffling along to her bed,
Laboring under his sackful of sand,
To lead the way to Slumber Land.
Over her eyes so soft and brown,
He pulls the lids securely down;
He sprinkles sand on the noisy old clock
Till he hushes the sound of its tick-tick-tock.
Then he leans out over the window sill
And says to the winds, "Be still! be still!"
And the winds go whispering far away

The Making of Rebecca.

A CHARACTER SKETCH.

No. II.

Riverboro, from force of habit, still called Miranda and Jane the Sawyer girls, though both were between fifty and sixty, when their niece, Rebecca, was committed to their care by their widowed sister, Aurelia, whose romantic marriage they had considered "a mighty poor speculation." "There's worse things than being old maids," they had confidently asserted, and probably the experience of Aurelia had done much to confirm that opinion.

Perhaps it could hardly be possible to conceive of a greater contrast than existed between the child's old home and her new one at the brick house, so it was no surprise to her brother John, the only one who seems to have got any sort of a key to the complex nature of poor little Rebecca, to receive the following letter. "Dear John, you remember when we tied the new dog in the barn, how he bit the rope and howled. I am just like him, only the brick house is the barn, and I cannot bite Aunt Miranda because I must be grateful, and education is going to be the making of me, and help you pay off the mortgage when we grow up."

Somehow Rebecca felt instinctively that it was wrong and mean to be under her aunt's roof, eating her bread, wearing clothes and studying books paid for by her, and yet disliking her so heartily all

Where nobody minds how they frolic and play,

While the big, round moon, all solemn and still,

Comes slowly tip-toeing over the hill.

And in through the window is careful to peep

To see if Tottie is fast asleep.

Now, as the sun comes up from his rest,

And the little bed is an empty nest,

And Tottie, established in somebody's lap,

Is breaking her fast with a bowl of pap,

I say: "Little Tottie, come, tell me true,

Where did the Sleep Man go with you?

And what did you see, and what did you do

In the place that the Sleep Man took you to?"

Then does Tottie proceed to tell

Most marvellous tales of what befell

And of what she witnessed on every hand

As she followed the Sleep Man through Slumber Land.

She gives me a faithful and full report

Of all the doings at Kitty-Cat Court,

Of how she goes rambling with Goody-Two-Shoes

Through the Santa Claus Palace of old Mother Goose;

Of how, as a relish for Dollie, she picks

The doughnuts that grow on the peppermint sticks;

And of apples enormous on wee little trees—

And the children eat them whenever they please,

For of stomach-ache in this wonderful place

Tottie never has heard of a single case.

She tells of the parks so extensive and pretty

That adorn the best wards of the Building-Block City.

Where the deer may be romped with, the swans come at call,

And the fishes go strolling about on the Mall.

She says it is right in these curious parts

That you find the most cute little donkey carts,

With no bothersome driver-boys walking beside,

But the donkeys say, "Please, will you get in and ride?"

Though they trot very hard, so securely you sit,

You never get frightened the least little bit.

'Tis here, as you travel the country round,

The broken is mended, the lost is found;

And the dollies melted and maimed and worn,

With heads dissevered and flesh so torn

That the stuffing ran horribly out on the floor,

Are sound and fair as they were before.

And here there lie in a soft little pile,

With their tails curled up in the cunningest style,

With tickly tongues and stomachs round,

All the puppies that Papa drowned.

But oh! I can only beg to tell

What this little maid portrays so well,

As she rests reclining in somebody's lap,

Slowly absorbing her bowl of pap,

But she paints me a country of such delight

That I really think, on some fine night,

I must take the Sleep Man's other hand

And go with Tottie to Slumber Land.

Of Course.

"Did you ever see an elephant's skin?" asked the teacher.
"Yes, sir."
"Where?"
"On the elephant, sir," said the innocent child.

A New Member.

This is my first letter to "The Farmer's Advocate," and I hope it will be a success. I am going to school, and am in the Fourth Book. My studies are arithmetic, geography, spelling, history, reading, physiology, grammar and composition. The study I like best is spelling. My father takes "The Farmer's Advocate," and he likes it fine. I enjoy reading the story of "Glengarry School Days" very much. I was at a little girl's birthday party a week ago, and we had great fun playing games. I must close this time, wishing the editor every success.

IDA C. GILES (age 11).

Paisley, Ont.

A New Writer.

I have for some time been reading the "Children's Corner" of "The Farmer's Advocate," and now I have decided to write to you. I am a little girl, eight years old, and am in Third Book at school. My studies are arithmetic, grammar, history, spelling, reading, philosophy, composition, and geography. But I like history best of all. I live two and a half miles from the village. Well, I am afraid I will take up too much space, so I will close, wishing the editor every success.

MABEL C. GILES.

Paisley, Ont.

Another Favorite Book.

As I saw in the "Children's Corner," "The Farmer's Advocate," of the children writing sketches on books which they have read, I thought I would also write. My book is entitled "Ivy."

Ivy was a little girl whose mother had died, and at the age of ten she was left to take care of the house of her father and two brothers: Fred, who was older than her, and Ned, who was only a baby. Ivy's father was a fisherman, and he was drowned. Fred turned out to be a bad boy, and abused his brother and sister. Little Ned took ill and died, and Ivy was left alone. She always loved her brother Fred, and when he was found almost dead, she nursed him, and, when he recovered, he repented of the way he had used Ivy, and they lived happily together. I like this book because Ivy was so kind and forgiving to her father and brothers.

IRENE GOTT.

Caledon East.



The Pet of the Family, Which Is It?

(Contributed by a subscriber, whose name and address have, unfortunately, been lost.)

the time. She fought desperately against this dislike, and tried hard to conquer it, but under the searching eyes, and in sound of the sharp, querulous voice, this faulty, passionate and very human child never seemed able to show the best side of her nature.

That the invitation to the painstaking, practical and reliable, though somewhat slow-witted Hannah should have been accepted on behalf of the apparently irresponsible Rebecca was a distinct grievance to Miss Miranda, and possibly a disappointment to the more tender-hearted Miss Jane, sentiments which could not but have their effect upon the reception awaiting her. "I don't know as I cal'lated to be the makin' of any child," somewhat acrimoniously had said Miss Miranda, as she folded away Aurelia's letter. "I s'posed, of course, we'd get the one we asked for, but it's just like her to palm off the wild one on somebody else;" and then followed the outburst: "I know Aurelia, if you don't. I've seen her house, and I've seen that batch of children wearin' one another's clothes, and never caring whether they had 'em right side out or not. That child will, like as not, come here with a passel of things borrowed from the rest of the family. She'll have Hannah's shoes, and John's undershirts, and Mark's socks, most likely. . . I suppose she never had a thimble on her finger in her life, but she'll know the feeling o' one before she's been here many days. She've probably never seen a duster, and will be as hard to train into

our ways as if she were a heathen." "Perhaps," interposed the softer-hearted Jane, "she may turn out more biddable 'n we think."

"She'll mind when she's spoken to, biddable or not," is the decision of Miranda. Page 33 tells us that Aunt Miranda was "just, conscientious, economical and industrious, faithful to her religious duties and her membership in missionary and other societies, but that one longed for just one warm little fault, one likeable failing, to make you sure that her heart existed for other purposes than for the pumping and circulation of her blood." But Jane, who had loved and lost in her early girlhood, had tenderer sympathies, hidden, perhaps, from others, but leavening her life and broadening her views.

"As sunshine in a shady place was Aunt Jane to Rebecca. During the long hours of sewing, a time of great trial to the little exile from Sunnybrook Farm, Aunt Jane's patience held good until some small measure of skill was creeping into the fingers which managed pencil, pen and paint-brush so deftly, but yet were so clumsy with the dainty little needle. It was Aunt Jane, too, who, when as that "poor little, unlucky, misfortunate thing" managed to get paint all over herself and was condemned by the relentless Miranda to wear the besmirched dress until it was worn out, contrived, as a mitigation of her penance, "a ruffled dimity pinafore, artfully-shaped to conceal all the spots." Thus between the snubs at home, and the al-

most hero worship at school, the making of Rebecca made rapid strides.

At this stage in her career, Rebecca was not only a puzzle to herself—a very battle-ground, upon which the wise and foolish, real and unreal impulses of her high-strung nature fought hard, with just an occasional truce—but she was a puzzle to all who had anything to do with her. Mr. Cobb (long ago dubbed Uncle Jerry) was "sure she was going to turn out something remarkable—a singer, or a writer, or a lady doctor, like that Miss Parks, up to Cornish, her gift of the gab is what's going to be the makin' of her." Her school teacher, whilst recognizing the exceptional ability of her pupil, found it very difficult to curb her flights of fancy, and to bring her within the safe limits of the school curriculum. What could be done with a child whose composition on "Joy and Duty" was comprised in the pithy couplet:

"When Joy and Duty clash
Let Duty go to smash."

Afterwards amended to read:

"When Joy and Duty clash,
'Tis Joy must go to smash!"

Miss Miranda Randall considered Rebecca "the beatin'est child," adding in a burst of confidence: "You don't think she's a leetle mite crazy, do you, Jane?" "I don't think she's like the rest of us," responds Jane, "but whether it's

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for the better or worse, I can't hardly tell. She's got the making of most anything in her; but I feel sometimes as if we were not fitted to cope with her."

"Stuff and nonsense," says Miranda. "Speak for yourself. I feel fitted to cope with any child that ever was born into the world!"

Meanwhile, Rebecca took herself seriously to task, and at last resolved to punish herself every time she incurred the displeasure of her aunt. She didn't in the least mind being condemned to stop away from Alice Robinson's party, where the refreshments would probably be peppermint lozenges washed down with a glass of well water; for, as she confided to her especial chum, Emma Jane, it was just like having "a picnic in a graveyard," so that would be no punishment at all. She considered the relative values, as penances, of hair-cloth next the skin, of a pebble in her shoe, either of which would be sure to attract the notice of her Argus-eyed relation. "She felt she must give up something, and she had so little to give—hardly anything, but . . .

. . . Yes, that would do, the beloved pink parasol. She could not hide it in the attic, for in some moment of weakness she would be sure to take it out again. She feared she had not the moral energy to break it into bits. Her eyes moved from the parasol to the apple trees, and then fell to the well curb. That would do. She would fling her dearest possession into the depths of the water. . . At the crucial instant of renunciation, she was greatly helped by the reflection that she closely resembled the heathen mothers who cast their babes to the crocodiles in the Ganges.

The sequel might be guessed. The ivory hook of the parasol had caught in the chain gear. Abijah Flagg had to be

summoned to remove the exciting cause of the trouble, and when "the little offering of the contrite heart" was jerked up, bent and ruined, the anger of Miss Mirandy was not, perhaps, without some excuse, nor was it likely that it would find any abatement when poor Rebecca, driven to the wall, had to avow the reasons lying behind the sacrifice of her sunshade. "See here, Rebecca," said the irate Miranda, "you're too big to be whipped, and I shall never whip you; but when you think you ain't punished enough, just tell me, and I'll make out to invent a little something more. I ain't so smart as some folks, but I can do that much; and whatever it is, it'll be something that won't punish the whole family, and make 'em drink ivory dust, wood chips and pink silk rags with their water."

Once, when the child, driven to despair, slipped out of the window and sought refuge with the kindly Cobbs, simple Uncle Jerry, by words of tender, tactful sympathy, induces her to go back before her escapade has been discovered. "Step in an' curl up in the corner; we ain't goin' to let folks see little runaway gals, 'cause they're goin' back to begin all over ag'in!"

But here we must leave Rebecca, into whose life crept many other influences, which all had their share in the moulding of her really fine character, but we hope we have culled enough from the initial chapters of her history to induce our friends of the "Home Magazine" to read the remainder for themselves, drawing therefrom inferences and learning some lessons which may be helpful to them in their efforts to obey the direct injunction given them whenever a little one is committed to their charge. "Take this child and train it for me." H. A. B.



Palms.

H. M. H., Elgin Co., Ont., writes: "Will you kindly tell me how to repot and care for my palm? I think it is what they call the Bel. Is there any difference in the care a date palm should receive? Kindly let me know through your valuable paper as soon as possible, as the Bel palm is root-bound, and oblige."

Ans.—Probably your palm is the Kentia Belmoreana, a common greenhouse variety. All ordinary palms should thrive under the same treatment. Give good drainage, a soil composed of rotted sod enriched with stable manure, with just enough peat or sand to make it friable, and be sure to give plenty of water. To shift, get a pot just a size or two larger. Now, turn your pot with the palm in it on one side, and rap it sharply to loosen the soil. Now turn over and extract carefully, so that the soil may come out in a ball without disturbing the palm. Put some soil in the bottom of the larger pot and set the ball in, then pack in more soil all around the edge, ramming it in very firmly. If red spider or thrips should appear, drive them off by syringing forcibly. If for any reason the soil in the pot has become sour, better shake it all off very carefully, and repot with new soil entirely.

Pansies in a Rose Bed.

The following paragraph, from "Mrs. Ely's Hardy Garden," will recommend itself to all lovers of those two gems of the flower garden, roses and pansies:

"The most practical hint that I was able to get from 'Elizabeth's German Garden' was where she spoke of carpeting her rose beds with pansies. This instantly appealed to me, as I greatly dislike to see the earth in beds and borders, and in rose beds it is always to be seen. So I bought an ounce each of white and yellow pansy seed, sowed it about the 10th of July in the

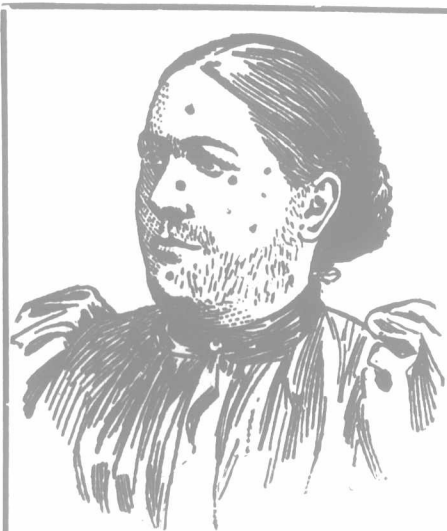
partly-shaded end of the seed-bed, and by October 1st had splendid, great plants. I did not allow these to blossom, but picked off the buds, and, after the rose beds had been given a plentiful top-dressing of manure, carefully stirred in with a large trowel, I transplanted my pansy plants. Of course, they had to be covered over with the roses the last of November, and often during the winter I wondered whether the dears would be smothered. On the 28th of March the beds were uncovered, and, imagine it! there were pansies in bloom. From April 10th till late in August these beds were simply a carpet of white and yellow. I never saw anything like it. It was probably due to the rich soil, perhaps also to the free watering necessary for the roses. Then, in order that no pansies should go to seed, my own maid, who is very fond of flowers, undertook each morning to cut off all that were beginning to wither. This required from one to two hours, but certainly prolonged the bloom. Now pansy seed in the seed-bed about the tenth of July, and transplant late in October."

Great Earthquakes.

1456—Naples, 40,000 killed.
 1531—Lisbon, 30,000 killed.
 1626—Naples, 70,000 killed.
 1703—Jeddo, 200,000 killed.
 1755—Lisbon, 50,000 killed.
 1797—Quito, 40,000 killed.
 1805—Naples, 6,000 killed.
 1829—Spain, 6,000 killed.
 1830—Canton, 6,000 killed.
 1859—Quito, 5,000 killed.
 1868—Peru, 25,000 killed.
 1875—Columbia, 14,000 killed.
 1887—Italy, 2,000 killed.
 1888—Yunnan, 4,000 killed.

TRIE.

"Henock, what do you think of the man who marries for money?"
 "I think he earns every cent he gets."



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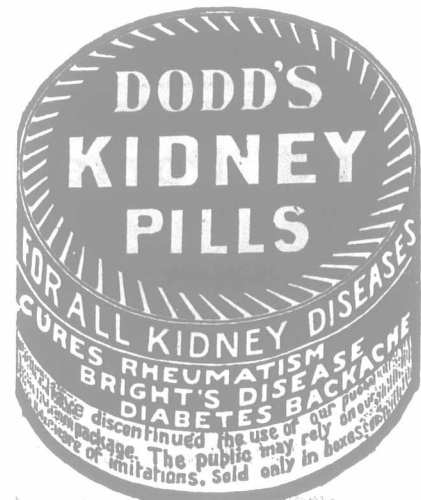
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"To-day is yesterday's pupil."

Life is not so short but that there is always time for courtesy.—Ralph Waldo Emerson.



About the House.

Article IV.—Eggs.

As eggs are, at this season, in much demand, it may be an opportune time for discussing their food value. Since the young chicken is built up from the contents of the egg, the most thoughtless regarding cause and effect must judge that eggs must be rich in building material for the human body, as well as for the small frame of the little chick. A chemical analysis shows that this is actually so. Water, proteid and certain mineral matters are, it will be remembered, the "building and repairing" elements for the body; and eggs are not only rich in all these substances, but contain, also in the yolk, a considerable proportion of fat. As a general food, in fact, 15 to 20 eggs are about equal in value to two pounds of medium-fat meat, while, owing to the fat and iron contained in them, they are of especial value for little children, and people who are inclined to be anemic.

There is an unaccountable prejudice in favor of brown eggs, which are generally supposed to be richer than white. Chemical analysis, however, does not warrant this illusion, the two invariably showing about the same composition.

In cooking eggs, it should be remembered that overcooking renders them comparatively indigestible. Soft-boiled eggs, in fact, require only 1½ hours for digestion, whereas hard-boiled ones require three hours; if grated, or chopped finely, somewhat less. . . . And just here, how many of you know how to boil an egg? "Why, of course," probably arises a chorus, "just drop it into boiling water and boil three minutes." Nevertheless, however well-established such a method may be, it is necessary to say that it is not the right one, the brisk boiling tending to harden the white into a firm, opaque mass, whereas it should, in order that its full food value may be gained, be of a soft, jelly-like consistency and semi-transparent. An ideal way of boiling an egg is to set it in a dish on the back of the range (the very back, where it will not simmer), cover with boiling water, put on a lid, and leave for ten minutes.

As will be noted above, carbohydrates are not mentioned in the composition of the egg. Carbohydrates, it will be remembered, are especially valuable in supplying energy (although the proteids also perform this function), and, when called into requisition, spare the proteids to their more especial work of building up tissue. Now, it will be judged that if we combine some substance rich in carbohydrates with eggs, we shall have a very complete food, consisting of proteid, fat, minerals, water and carbohydrates; and this is just what we do when we mix eggs with any of the cereals (rice, etc.) in making a pudding. Such puddings are, in fact, about as valuable a form of food as we can devise, and might well be seen more frequently on our tables.

Next time we shall try to have something to say in regard to the food value of vegetables.

Some Seasonable Recipes.

Rhubarb Jam.—Six lbs. rhubarb, 5 lbs. sugar, 1 lemon. Peel the rhubarb and cut in pieces, put in a granite pan with the juice and grated rind of a lemon and 5 lbs. sugar. Boil very slowly for about three-quarters of an hour, stirring very frequently.

Rhubarb Cream (A New Zealand Recipe).—Stew rhubarb with plenty of sugar and very little water. When soft put through a sieve, and put back in saucepan with the grated peel and juice of half a lemon and some gelatine (¼ oz. to the pint of rhubarb) which has been soaked in a little water. Stir over the fire until gelatine is melted, then set

aside to cool. Whip half a pint of cream stiff and beat into the rhubarb, then put in a wet mould, and set away until of the consistency of jelly.

Rhubarb Sauce.—Cut in half-inch pieces, leaving skin on. Put in a pan and cover thickly with sugar, adding no water. Cover tightly and cook.

Rhubarb and Rice.—Butter a pudding dish and put some bits of butter on the bottom. Cover with a layer of rhubarb, then a thick layer of sugar, then one of boiled rice, until the dish is full, with rice on top. Bake, and serve with cream and sugar.

Rhubarb and Cornstarch.—Stew to a pulp, sweeten, and thicken with cornstarch (four tablespoons to the quart). Let cool in a mould, and serve with cream and sugar.

Rhubarb and Tapioca.—Soak one-half cup tapioca and cook for 20 minutes. Have rhubarb stewed, sweetened, and flavored with orange peel. Pour the tapioca over the rhubarb. Cover, and bake one-half hour.

Some Meat Recipes.

Meat Souffle.—Run some beef (chicken or veal will do) through a meat chopper. Make a cupful of white sauce, season well, and add to the minced meat, keeping all hot over the fire. Mix in the beaten yolks of two eggs, let cool, then stir in the beaten whites. Turn into a buttered dish and bake.

Stuffed Steak.—Take a round steak 1½ or 2 inches thick. Spread out and cover with a stuffing made with breadcrumbs, as for fowl. Roll up and tie or fasten into shape with skewers. Put two tablespoons fat in a saucepan, and let heat until a blue smoke rises, then brown the roll well. Next pour on a little boiling water, to cover the bottom of the saucepan about an inch in depth. Cover closely and simmer very gently two hours or more, adding a little more water when necessary. Thicken the gravy with browned flour, season and serve.

Creamed Liver.—Cut the liver in bits, and cover with cold water in a saucepan. Add 2 cloves, a little onion, sage, or whatever seasoning is liked. Let simmer half an hour; pour off some of the water, if necessary, add a little cream, thicken with flour, and serve on buttered toast.

Bacon.—Fry. Dip each piece into a batter made of 1 cup flour, 1 of milk, 1 well-beaten egg, and a little salt. Fry again, and serve hot.

Creamed Sweetbreads.—Parboil the sweetbreads 15 or 20 minutes, then separate into small pieces. Smooth 2 tablespoonfuls melted butter and 2 tablespoonfuls flour together, add a cupful milk or cream, season, let boil, add sweetbreads, and serve hot.

Tripe.—Wash, put in cold water and let get hot; scrape and simmer until tender. Take out, cut in bits, put in saucepan with a pint of milk, and let simmer one hour. Boil four onions and chop. Pour milk off tripe, thicken with 1 tablespoon flour, season, put back on tripe. Add onions, let boil up, and serve.

Recipes.

Rice Biscuits.—Sift 7 ozs. sugar; add to it ¼ lb. ground rice, 7 ozs. butter, 7 ozs. Five Roses flour, and mix into a paste with 2 eggs.

Old Maid Bread.—1 quart Five Roses flour, 2 eggs, 2 tablespoons lard, 1 teaspoon salt, 1 teacup yeast, 1 cup milk. Make into a soft dough, reserving one-third of the flour for the second rising.

There are natures in which, if they love us, we are conscious of having a sort of baptism and consecration. They bind us over to rectitude and purity by their pure belief about us, and our sins become the worst kind of sacrilege, which tears down the invisible altar of trust.—George Eliot.

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Daffodils.

"I wander'd lonely as a cloud
That floats on high o'er vales and hills,
When all at once I saw a crowd,
A host of golden daffodils;
Beside the lake, beneath the trees,
Fluttering and dancing in the breeze.

"Continuous as the stars that shine
And twinkle on the Milky Way,
They stretched in never-ending line
Along the margin of a bay;
Ten thousand saw I at a glance,
Tossing their heads in sprightly dance.

The waves beside them danced, but they
Outdid the sparkling waves in glee:
A poet could not but be gay,
In such a jocund company;
I gazed—and gazed—but little thought
What wealth the show to me had brought;

"For oft when on my couch I lie,
In vacant or in pensive mood,
They flash upon that inward eye
Which is the bliss of solitude,
And then my heart with pleasure fills,
And dances with the daffodils."

—Wordsworth.

AVOID BEING A BORE.

The woman who would avoid becoming a bore must remember that her personal affairs and petty domestic troubles are of no particular interest to anyone, except, perhaps, to spiteful neighbors, to whom they form food for gossip.

Miserable Deception PRACTICED BY Certain Makers of Adulterated and Worthless Package Dyes.

Notwithstanding the unanimous verdict of the world's most eminent color chemists, that it is impossible to color animal (wool and silk) fibres and vegetable (cotton and linen) fibres with the same dye, we find speculators who are jealous of the world-wide success of the DIAMOND DYES, putting up, and offering for sale worthless package dyes which they represent will color any material with one dye. This cruel deception has caused serious losses to many a home in Canada.

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The ladies will insure and protect their interests if they avoid all merchants who sell the crude and worthless package dyes recently put on the market. In every case ask for the DIAMOND DYES, and see that each packet bears the words "DIAMOND PACKAGE DYES." Please send your name and address to Wells & Richardson Co., Ltd., Montreal, P. Q., and you will receive FREE of cost New Instruction Book for Home Dyeing, Card of Dyed Samples, and story, in verse, entitled, "The Longjohns' Trip to the Klondike."

INGLE NOOK CHATS

Dear Chatterers.—Away last summer, I read in an American paper about a "fireless" stove, but tossed the article aside as unworthy of notice. Later, I came upon a description of the same paradox in one of our own papers, the Brantford—Courier or Expositor?—to save my life I can't tell which. However, this time I cut the article out, and put it among my clippings, and now that the summer is near I am just going to give it to you. I am only sorry that I did not make a note of the paper so that I could place the credit in the right place.

Personally I can hardly believe in this fireless stove, although, too, there must be something in it, or a paper so reputable as either of our Brantford contemporaries would not be likely to endorse it. Had I any convenient way of trying the experiment, I should be tempted to go right at it, but one can't "do things" very well in boarding-houses, etc., and then—where would one get the hay? Dear, dear, what a state of affairs for a country-bred lassie to come to!

However, if the "stove" is any good, it might be a very convenient thing for the hot weather, when fires are a thorn in the flesh, and, perhaps, some of you will be inspired to make one. If you do, kindly report your success to the Nook, won't you?

DAME DURDEN.

The following is the article, from "Marion Harland," just as it appeared in the Brantford paper. She first quotes from a letter which she received in reference to it, then continues:

"The second letter tells some things of which I, at least, was ignorant until I read it. A Danish correspondent informs us that 'the hay stove has been used in Denmark for 500 years.' This later story gives hers quite a modern cast:

"In looking over your 'Corner,' I was greatly interested in regard to the fireless stoves. Since then I have been reading, and I find that automatic cooking boxes, or fireless stoves, were in general use among the Hebrews nearly 2,000 years ago. Greek and Roman writers frequently refer to them. In his edition of Juvenal, Friedlander cites a commentator who refers to the Jews, who, 'a day before the Sabbath, put their viands, hot, into the cooking boxes, the pots being covered with napkins and wrapped about with hay, so that they may have warm food on the Sabbath.' I find these boxes are manufactured in the States.

"I hope this will help those interested.

"Buffalo, N. Y.

"Those canny Hebrews! lovers, ever, of the Law and of luxury! They obeyed the Fourth Commandment to the letter, yet kept their fleshpots hot. This generation owes them an incalculable number of debts, and now, it seems, we add our fireless stove to the list.

"But to business! Let Joe bring into the kitchen a box about four feet long, two feet deep and perhaps eighteen inches wide, with a whole top. Let Dan follow with a big armful of dry hay, or excelsior, or of shredded paper, such as chinapackers use. This is the stove. A correspondent who sent in the account of her experiments with it, a month ago, shall describe the next steps:

"Take a pot without a handle, as easier to pack. Put about three inches of packing in bottom, then set in the pot you intend to use, exactly in the middle, and proceed to pack, tightly, hay about it, up to the top of pot. Take out pot, put whatever in it is to be cooked, let it come to a boil on range, and boil furiously five minutes. Quickly put into hay box, so water is still bubbling when packed. Cover everything with cheesecloth bag, filled with hay, and, presently, there is your dinner perfectly cooked.

"I have two hay boxes, and yesterday, at 5 p. m., put one cup of washed rice in

a pint of boiling water and boiled five minutes, popped in the hay box, and covered up. Then I went out, returning at 5, to find my rice, perfectly cooked, in big, mealy separate flakes, perfectly dry and very hot. Time, two hours; refuting the theory that the rice must be rapidly boiled.

"To-day, I put two pounds of lamb, some potatoes, onions and carrots in a pot, with one quart of cold water (wanted a stronger broth), boiled five minutes, put in hay box at 9 a. m. Had it for luncheon at 1 o'clock, hot and savory.

"Last week I made a soup, putting in two pounds of shin in two pieces, two cups of water, a cupful of dried lima beans, just from the grocers', some dried split peas, and all else necessary to a good vegetable soup. This was at 1 p. m., and meant for supper, but I went out and forgot it. When I remembered it, next morning, I found everything perfectly cooked.

"The principle of the hay-box stove is—'keep in all heat by close packing and exclude air.' Do not allow any water for evaporation, as it does not take place. I think the hay box is perfect for anything that demands slow cooking.

"E. M. D."

"A pot-roast of beef, or lamb, or a tough fowl should be seared by turning it over several times in a deep pot, in which some good beef or veal dripping (never mutton) has been heated to bubbling. If you can afford butter, it is better still. Fry a sliced onion in the fat before the meat goes in. When all sides have been seared by the hissing fat, cover closely and leave at the side of the range half an hour for a small roast, an hour for a larger. All that is necessary is to heat it through. This end gained, burrow a hole in the hay with which the box is filled, put in the pot, keeping the lid closed tightly, bury in the hay, fit the top in place on the box, lay a folded rug or old comfoter over all, and leave it for five, six, eight hours, as the case may be.

"Cereals of all kinds may be cooked in our box. Oatmeal, always the better for long cooking, comes out a hot jelly that melts upon the tongue. Apples baked thus are tender and delicious.

Helponabit Has a Word for Busybody.

I thought at first of slipping this letter in among the Literary Society contributions on the "Entertaining" topic; then, considering that it was addressed especially to Busybody, reconsidered the matter. We really couldn't afford to let such a bright, breezy letter slip from the Ingle Nook—and, then, Busybody deserved her especial letter. D. D.

Dear Dame Durden,—

In a former issue of "The Farmer's Advocate," "Busybody" asks for a description of evening parties that the friends of the Ingle Nook have given, or for suggestions. On looking over a list of subjects you gave some time ago, that you wished the Nookers to write on, this is one of them, so I feel right in replying.

We have never given a card or dance party, and yet we have had some very pleasant social evenings. I will try and give a description of the last party we gave this winter, when our daughter came of age. We always have the house well lighted—a lamp in every room upstairs, and in upper and lower halls (this saves carrying a lamp from room to room), and two or three large lamps in parlor and dining-room when we have company. Kitchen is always well lighted. I think there is nothing that adds so much to home comfort as bright fires and plenty of light. Now for the party. We sent out forty invitations; had four regrets. I have some bright, lively nephews and nieces who think a social evening could not be spent without either cards or dancing. One said to me after they had accepted the invitation, "Auntie, you must give us a dance. I don't know how you will

Sunshine Furnace



The "Sunshine" furnace and "sunny" ways are synonymous.

The cold, dreary winter days can be made cheery and warm with a pure, healthful heat if you have a "Sunshine" furnace.

Is easier to operate, cleaner, uses less fuel and "shines" in many other ways over common furnaces.

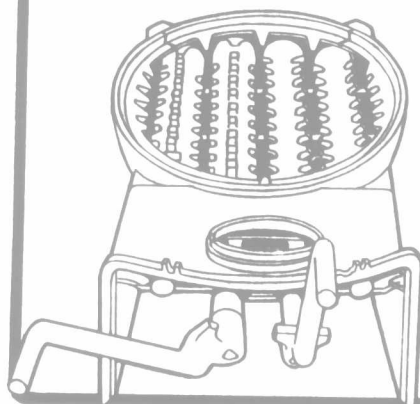
Two shakers are used to shake the heavy, triangular-shaped grates. This just cuts the work of shaking-down in half, besides being easier on the furnace than the old one-shaker style.

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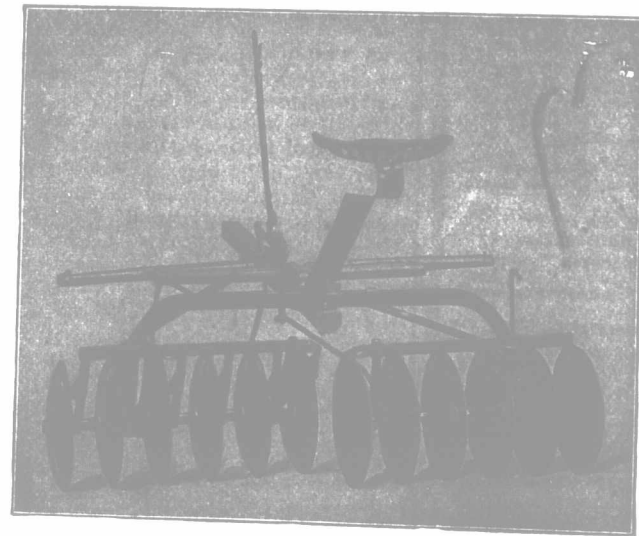
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CAPITAL, \$100,000.

SHARES, \$20 each.

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PRICE DELIVERED AT YOUR STATION:

12 x 16 inch Plate	\$19.00
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Three-horse Evener \$1.50 extra.

This will give you an idea what can be saved by being a shareholder. Write to-day.

Head Office and Factory: Durham, Ontario.

Imported Shetland Ponies

to be sold by auction

WEDNESDAY, MAY 9, 1906,
at Burns & Sheppard's Repository, Toronto.

A carload of imported Shetland stallions and mares; an extra good lot.

JAMES DALGETY, GLENCOE, ONT.

Farm Lands

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We have a number of well-improved farm lands for sale, at prices ranging from **\$17.00** up to **\$35.00 per acre.**

We have the exclusive agency of over 40,000 acres of land west of Davidson, Goose Lake, Eagle Lake and South Battleford district. Some splendid bargains in city property.

Balfour Broadfoot Land Co.
Box 293. **Hamilton Street,**
REGINA, SASK.

Grow Seed Peas— little risk now— good profit—

Been reading about peas in Guelph College Bulletin and Provincial Crop Records? They say the pea-weevil is gone for seven years. Queer thing about pea-weevil... he comes for seven years and vanishes for seven. This is his first year for vanishing. Safe now to grow seed peas.

Report of Department of Agriculture shows average crop is twenty bushels of seed peas to the acre. Some Canadians raise three crops a year. Price ranges from 75c. to 85c. a bushel. Easy crop to grow... market never glutted... profit sure. Why don't you go into seed peas this Spring?

STAMMERERS

The **Arnott Method** is the only logical method for the cure of Stammering. It treats the **CAUSE**, not merely the **HABIT**, and insures natural speech. Pamphlet, particulars and references sent on request.

Address:

THE ARNOTT INSTITUTE,
BERLIN, ONT., CAN.

IS NO EXPERIMENT



But a Positive Cure.

That you may be assured of the merits of this wonderful medical triumph, I will send ten days' trial treatment free. Address, with stamp,

MRS. F. V. CURRAH, Windsor, Ont.

Show Shetland Stallion, "Haldor"

Double cross famous Lord of the Isles (26) Black; 33 inches. Winner of first and championship Royal Show, 1905. Probably finest-stepping pony of size living. Reliable getter small-sized stock; all have small heads and beautiful action. Also several grand young Shetlands; highest pedigree. Price particulars:

LADIES' HOPE,
Underriver, Sevenoaks, England.

WEDDING stationery. Young ladies who are interested in what is proper in the matter of stationery for weddings, should send for our booklet. Free for the asking. Latest type faces. Best imported stock. **Lynn Side Press, Dept. 5, Simcoe, Ontario.**

Advertise in the Advocate

get on without it." The evening came, and when the guests arrived, and the introductions were over, we invited them to look at our "art" collections, and gave each a catalogue. We had thirty pieces which were placed around the dining room and through the parlor. Every article was numbered, and they had to put the number to the article on the catalogue. The fun was to get one article that would do for two or three things. For example, there was a photo of a baby. This was the "Home Ruler," but some thought it was the "Tie that Binds," others "The Result of Matchmaking"; but a matchholder on the parlor mantle, filled with matches, was "The Result of Matchmaking."

When they had gone over all the numbers, they took their seats, and exchanged papers. One called out the correct answers, and great was the fun at the mistakes. Three out of the party were correct, and they drew lots for the prize, which was a pretty holder for newspaper clippings. The one that got "Booby" only got twelve right. Then we had some music. I had asked those that I knew could favor us, so they came prepared.

After the songs, we gave them a trip through Canada on the "Funville Railway." A card was given to the ladies with half a proverb on it, and one to the gentlemen with the other half. Each gentleman had to find the lady who had the completion of his proverb, and she was his partner for the trip. When they were seated, each pair was given a list of the names of the stations they were to call at. This gave them both fun and thought. They started in the Northwest and came on through Ontario. For example, one of the stations

was "An Indian chief and a place where a stream is crossed"; answer, "Brantford." Our minister is a bright, quick fellow. I was so amused to see him puzzling over, "Trifling talk, and a son of Noah." He had to give it up. Answer, "Chatham." The last station was "Refreshment Station," and we served it where they sat. We gave them chicken salad, thin bread and butter, sponge and layer cake, birthday cake, ice cream and coffee. Then they had more songs, glees and choruses. One gentleman brought a fortuneteller, and the fun was that if three or four asked the same question they got a different answer. Now, this was a mixed party of Anglicans, Presbyterians and Methodists. They left saying and looking as if they had had a pleasant evening, and wishing to have many happy returns.

YORK CO., ONT. HELPONABIT.
P. S.—There is, on page 413, of March 15th issue of "The Farmer's Advocate," a book offered for "Bright Ideas for Entertainment." Better get one, Busy-body. HELPONABIT.

Answer to "Lizzie."

Dear Dame Durden,—Lizzie, Huron Co., will find the following a most successful way of polishing her horns: First, boil the horn to remove the pith, if it has been freshly taken from the animal. If it is an old, dry horn, the pith may be dried out, and boiling is not necessary; but it may be laid in hot water for a short time to soften. Then scrape off all roughness with a coarse file, or a knife. Rub round the horn with coarse and then with finer sandpaper. Rub horn lengthwise with flannel cloth, dipped in powdered pumice stone or rotten

stone, and moistened with linseed oil. Continue rubbing till all sandpaper marks have disappeared. Give final polish with clean flannel cloth, and lastly with a piece of tissue paper.

I was greatly interested in the letter by Jack's Wife, in March 29th issue. Like her, my education, as regards housewifery and cooking, was somewhat defective, and, although the last half dozen years have given me much experience, there is much yet I would learn. Our Women's Branch of the Farmers' Institute is doing something for us, but in this subject of food values we seem to be like sheep without a shepherd. We are to take up shortly a study of the proper cooking of meats with regard to its food value, and also one on vegetables, so I hope to receive, through "The Farmer's Advocate" practical help on this subject of food values. Oxford Co., Ont. HOLLY.

Carnival Dress.

If "Dolly Varden" will write to Samuel French & Co., publishers, New York, re book on Carnival Dress, she will probably get what she wants. The Delineator Co., New York, also publishes one which has been highly recommended.

Rhubarb Wine

The following recipe for rhubarb wine has been kindly sent by a friend of "The Farmer's Advocate":

Rhubarb Wine.—Take a tub, with a stone in it, and hammer the rhubarb so as to press out the juice; add one gallon of clean, fresh, soft water, and seven pounds of brown sugar. Allow it to ferment, and bottle.

GLENGARRY SCHOOL DAYS.

A STORY OF EARLY DAYS IN GLENGARRY.

By Ralph Connor—Rev. C. W. Gordon.

Before Fusie had got much past center, Dan, who had been playing in the rear of the scrimmage, overtook him, and, with a fierce body check upset the little Frenchman and secured the ball. Wheeling, he saw both Hughie and Craven bearing down swiftly upon him.

"Rush for the goal!" he shouted to Jimmie Ben, who was following Hughie hard. Jimmie Ben hesitated. "Back to your defense!" yelled Dan, cutting across and trying to escape between Hughie and Craven.

It was in vain. Both of the Twentieth men fell upon him, and the master, snatching the ball, sped like lightning down the ice.

The crowd went wild. "Get back! Get back there!" screamed Hughie to the mob crowding in upon the ice. "Give us room! Give us a show!"

At this moment Craven, cornered by Hec Ross and two of the Red Shirts, with Dan hard upon his heels, passed clear across the ice to Hughie. With a swift turn Hughie caught the ball, dodged Jimmie Ben's fierce spring at him, and shot. But even as he shot, Jimmie Ben, recovering his balance, reached him and struck a hard, swinging blow upon his ankle. There was a sharp crack, and Hughie fell to the ice. The ball went wide.

"Time, there, umpire!" cried the master, falling on his knees beside Hughie. "Are you hurt, Hughie?" he asked eagerly. "What is it, my boy?"

"Oh, master, it's broken, but don't stop. Don't let them stop. We must win this game. We've only a few minutes. Take me back to the goal, and send Thomas out."

The eager, hurried whisper, the intense appeal in the white face and dark eyes, made the master hesitate in his emphatic refusal.

"You can't!" "Oh, don't stop! Don't stop it for me," cried Hughie, gripping the master's arm. "Help me up and take me back."

The master swore a fierce oath. "We'll do it, my boy. You're a trump. Here, Don," he called aloud, "we'll let Hughie keep goal for a little," and they ran Hughie back to the goal on one skate

"You go out, Thomas," gasped Hughie. "Don't talk. We've only five minutes."

"They have broken his leg," said the master, with a sob in his voice. "Nothing wrong, I hope," said Dan, skating up.

"No; play the game," said the master, fiercely. His black eyes were burning with a deep, red glow.

"Is it hurting much?" asked Thomas, lingering about Hughie.

"Oh, you just bet! But don't wait. Go on! Go on down! You've got to get this game!"

Thomas glanced at the foot hanging limp, and then at the white but resolute face. Then saying with slow, savage emphasis, "The brute beast! As sure as death I'll do for him," he skated off to join the forward line.

It was the front knock-off from goal. There was no plan of attack, but the Twentieth team, looking upon the faces of the master and Thomas, needed no words of command.

The final round was shot, short, sharp, fierce. A long drive from Farquhar Bheg sent the ball far up into the Twentieth territory. It was a bad play, for it gave Craven and Thomas their chance.

"Follow me close, Thomas," cried the master, meeting the ball and setting off like a whirlwind.

Past the little Reds, through the centers, and into the defense line he flashed, followed hard by Thomas. In vain Hec Ross tried to check, Craven was past him like the wind. There remained only Dan and Jimmie Ben. A few swift strides, and the master was almost within reach of Dan's club. With a touch of the ball to Thomas he charged into his waiting foe, flung him aside as he might a child, and swept on.

"Take the man, Thomas," he cried, and Thomas, gathered himself up in two short, quick strides, dashed hard upon Jimmie Ben, and hurled him crashing to the ice.

"Take that, you brute you!" he said, and followed after Craven.

Only Farquhar Bheg was left. "Take no chances," cried Craven again. "Come on!" and both of them, sweeping in upon the goal-keeper, lifted him clear through the

goal and carried the ball with them. "Time!" called the umpire. The great game was won.

Then, before the crowd had realized what had happened, and before they could pour in upon the ice, Craven skated back toward Jimmie Ben.

"The game is over," he said, in a low, fierce tone. "You cowardly blackguard, you weren't afraid to hit a boy, now stand up to a man, if you dare."

Jimmie Ben was no coward. Dropping his club he came eagerly forward, but no sooner had he got well ready than Craven struck him fair in the face, and before he could fall, caught him with a straight, swift blow on the chin, and, lifting him clear off his skates, landed him back on his head and shoulders on the ice, where he lay with his toes quivering.

"Serve him right," said Hec Ross. There was no more of it. The Twentieth crowds went wild with joy and rage, for their great game was won, and the news of what had befallen their captain had got round.

"He took his city, though, Mrs. Murray," said the master, after the great supper in the manse that evening, as Hughie lay upon the sofa, pale, suffering, but happy. "And not only one, but a whole continent of them, and," he added, "the game as well."

With sudden tears and a little break in her voice, the mother said, looking at her boy, "It was worth while taking the city, but I fear the game cost too much."

"Oh, pshaw, mother," said Hughie, "it's only one bone, and I tell you that the final round was worth a leg."

CHAPTER XV.

The Result.

"How many did you say, Craven, of those Glengarry men of yours?" Professor Grey was catchizing his nephew.

"Ten of them, sir, besides the minister's son, who is going to take the full university course."

"And all of them bound for the ministry?"

"So they say. And, judging by the way they take life, and the way, for instance, they play shinny, I

By Regulating the Food System

NEARLY ALL THE MOST COMMON
ILLS OF HUMANITY ARE PRE-
VENTED AND CURED BY

DR. CHASE'S KIDNEY-LIVER PILLS

"When our food is properly digested and assimilated, the waste matter promptly excreted and all the organs working in harmony we are well. When any derangements of these functions occur we are sick."

If we wait to consider for a moment, what a large proportion of such derangements arise from constipation of the bowels, torpidity of the liver and sluggish action of the kidneys it is not difficult to understand the far-reaching effects of Dr. Chase's Kidney-Liver Pills as a means of preventing and curing disease.

One of the results of our artificial modern life, and more especially that of winter, is too much eating and too little exercise. The liver and kidneys are overworked in their effort to remove the excess of waste matter, and when they fail in this work, disorders of some kind are bound to arise.

It is usually with the liver that trouble begins. The bile which should be poured into the intestines to aid digestion and insure healthful action of the bowels is left in the blood to poison the system.

Headache, biliousness, liver complaint and constipation are followed by uric acid poisoning, kidney disease and rheumatism when the kidneys play out.

Dr. Chase's Kidney-Liver Pills begin by enlivening the action of the liver and bowels, and thereby effecting a thorough cleansing of the whole filtering and excretory systems. By this means, constipation, biliousness, indigestion and all their accompanying symptoms are removed.

Then by their direct action on the kidneys, they purify the blood of uric acid poison, which is the cause of rheumatism, backache, lumbago and all the dreadfully painful and fatal diseases of the kidneys.

In the newspapers have appeared from time to time thousands of letters from persons who have been cured by Dr. Chase's Kidney-Liver Pills. In the majority of the homes of Canada this great family medicine is constantly kept on hand as a preventive and cure for these common ills of life. One pill a dose: 25 cents a box; at all dealers, or Edman-son, Bates & Co., Toronto.

THE OLD STORY.

"Doctor, I'm nearly dead with insomnia. I wish you could give me something that will make me sleep." "Professor, you remind me of a patient I once had in East Saginaw. He was—" "Good! That will do just as well. Go ahead and tell the story, doctor. I've heard it five or six times."

AN EX-MAYOR GIVES UNSTINTED PRAISE

**Dodd's Kidney Pills are the Very
Best Medicine I Ever Used
for Kidney Trouble.**

**Mr. Robert Sheppard, ex-Mayor of Gananoque, Ont., Testifies to the Merits
of Dodd's Kidney Pills.**

Gananoque, Ont., April 30.—(Special.)—"I suffered off and on for over four years from kidney trouble," writes Mr. Sheppard, of this place, "and, though I tried many remedies and was under a doctor a long while, I got no better. I had Bright's Disease slightly, Lumbago, pains in my loins and at times all over my body. My skin was dry, hard and burning. I could not sleep, the least exertion made me perspire fearfully, and my blood was so bad I broke out in boils all over the neck and back. I was in this state when I started taking Dodd's Kidney Pills, and in an incredibly short space of time the boils disappeared. I recovered my health, and now I am quite cured."

have a notion they will see it through."

"They come of a race that sees things through," answered the professor. "And this is the result of this Zion Hill Academy I have been hearing so much about?"

"Well, sir, they put in a good year's work, I must say."

"You might have done worse, sir. Indeed, you deserve great credit, sir."

"I? Not a bit. I simply showed them what to do and how to do it. But there's a woman up there that the world ought to know about. For love of her—"

"Oh, the world!" snorted the professor. "The world, sir! The Lord deliver us! It might do the world some good, I grant."

"It is for love of her these men are in for the ministry."

"You are wrong, sir. That is not their motive."

"No, perhaps it is not. It would be unfair to say so, but yet she—"

"I know, sir. I know, sir. Bless my soul, sir, I know her. I knew her before you were born. But—yes, yes—the professor spoke as if to himself—for love of her men would attempt great things. You have these names, Craven? Ah! Alexander Stewart, Donald Cameron, Thomas Finch—Finch, let me see—ah, yes, Finch. His mother died after a long illness. Yes, I remember. A very sad case, a very sad case, indeed."

"And yet not so sad, sir," put in Craven. "At any rate, it did not seem so at the time. That night it seemed anything but sad. It was wonderful."

The professor laid down his list and sat back in his chair.

"Go on, sir," he said, gazing curiously at Craven. "I have heard a little about it. Let me see, it was the night of the great match, was it not?"

"Did you know about that? Who told you about the match, sir?"

"I hear a great many things, and in curious ways. But go on, sir, go on."

Craven sat silent, and from the look in his eyes, his thought were far away.

"Well, sir, it's a thing I have never spoken about. It seems to me, if I may say so, something quite too sacred to speak of lightly."

Again Craven paused, while the professor waited.

"It was Hughie sent me there. There was a jubilation supper at the manse, you understand. Thomas Finch, the goal-keeper, you know—magnificent fellow, too—was not at the supper. A messenger had come for him, saying that his mother had taken a bad turn. Hughie was much disappointed, and they were all evidently anxious. I offered to drive over and enquire, and, of course, the minister's wife, though she had been on the go all day long, must needs go with me. I can never forget that night. I suppose you have noticed, sir, there are times when one is more sensitive to impressions from one's surroundings than others. There are times with me, too, when I seem to have a very vital kinship with nature. At any rate, during that drive nature seemed to get close to me. The dark, still forest, the crisp air, the frost sparkling in the starlight on the trees—it all seemed to be part of me. I fear I am not explaining myself."

Craven paused again, and his eyes began to glow. The professor still waited.

"When we reached the house we found them waiting for death. The minister's wife went in; I waited in the kitchen. By and by Billy Jack, that's her eldest son, you know, came out. 'She is asking for you,' he said, and I went in. I had often seen her before, and I rather think she liked me. You see, I had been able to help Thomas along pretty well, both in school and with his night work, and she was grateful for what I had done, absurdly grateful when one considers how little it was. I had seen death before, and it had always been ghastly, but there was

nothing ghastly in death that night. The whole scene is before me now, I suppose always will be."

His dead black eyes were beginning to show their deep red fire.

The professor looked at him for a moment or two, and then said, "Proceed, if you please," and Craven drew a long breath, as if recalling himself, and went on.

"The old man was there at one side, with his gray head down on the bed, his little girl kneeling beside him with her arm round his neck; opposite him the minister's wife, her face calm and steady, Billy Jack standing at the foot of the bed—he and little Jessac the only ones in the room who were weeping—and there at the head, Thomas, supporting his mother, now and then moistening her lips and giving her sips of stimulant, and so quick and steady, gentle as a woman, and smiling through it all. I could hardly believe it was the same big fellow who three hours before had carried the ball through the Front defense. I tell you, sir, it was wonderful."

"There was no fuss nor hysterical nonsense in that room. The mother lay there quite peaceful, pain all gone—and she had had enough of it in her day. She was quite a beautiful woman, too, in a way. Fine eyes, remarkable eyes, splendidly firm mouth, showing great nerve, I should say. All her life, I understand, she lived for others, and even now her thought was not of herself. When I came in she opened her eyes. They were like stars, actually shining, and her smile was like the sudden breaking of light through a cloud. She put out her hand for mine and said—and I value these words, sir—'Mr. Craven, I give you a mither's thanks and a mither's blessing for a' you have done for ma laddie.' She was Lowland Scotch, you know. My voice went all to pieces. I tried to say it was nothing, but stuck. Thomas helped me out, and, without a shake or quiver in his voice, he answered for me."

"Yes, indeed, mother, we'll not forget it."

"And perhaps you can help him a bit still. He will be needing it," she added.

"I assure you, sir, that quiet steadiness of Thomas and herself braced me up, and I was able to make my promise. And then she said, with a look that somehow reminded me of the deep, starlit night outside, through which I had just come, 'And you, Mr. Craven, you will give your life to God?'"

"Again my voice failed me. It was so unexpected, and quite overwhelming. Once more Thomas answered for me."

"Yes, mother, he will, sure, and she seemed to take it as my promise, for she smiled again at me, and closed her eyes."

"I had read of triumphant death-bed scenes, and all that before, without taking much stock in them, but believe me, sir, that room was full of glory. The very faces of those people, it seemed to me, were alight. It may be imagination, but even now, as I think of it, it seems real. There were no farewells, no wailing, and at the very last, not even tears. Thomas, who had nursed her for more than a year, still supported her, the smile on his face to the end. And the end—Craven's voice grew unsteady—it is difficult to speak of. The minister's wife repeated the words about the house with many mansions, and those about the valley of the shadow, and said a little prayer, and then we all waited for the end—for myself, I confess, with considerable fear and anxiety. I had no need to fear. After a long silence she sat up straight, and in her Scotch tongue, she said, with a kind of amazed joy in her tone, 'Ma fayther! Ma fayther! I am here.' Then she settled herself back in her son's arms, drew a deep breath, and was still. All through the night and next day the glory lingered round me. I went about as in a strange world. I am afraid you will be thinking me foolish, sir."

The stern old professor was openly

wiping his eyes. He seemed quite unable to find his voice. At length he took up the list again, and began to read it mechanically.

"What! What's this?" he said, suddenly, pointing to a name on the list.

"That, sir, is John Craven."

"Do you mean that you, too—"

"Yes, I mean it, if you think I am fit."

"Fit, Jack, my boy! None of us are fit. But what—how did this come?" The professor blew his nose like a trumpeter.

"That I can hardly tell myself," said Craven, with a kind of wonder in his voice; "but, at any rate, it is the result of my Glengarry School Days."

(The End.)

For Young Doctors.

During my second year at the Jefferson Medical College, Philadelphia, I had a classmate whom it would not be uncharitable to call a dullard. One of the professors was in the habit of taking the boys unawares and quizzing them. He said to this fellow one day:

"How much is a dose of ———?" giving the technical name of croton oil.

"A teaspoonful," was the ready reply.

The professor made no comment, and the fellow soon realized that he had made a mistake. After a quarter of an hour, he said:

"Professor, I want to change my answer to that question."

"It's too late, Mr ———," responded the professor, looking at his watch. "Your patient's been dead fourteen minutes."—[Cor. New York World.]

THE HORSE SHOW.

An Object Lesson to Farmers and Breeders.

On Saturday last the noted Percheron horse, Coquet, and a few colts sired by him in this section of the county, were on exhibition. Coquet, owned by Gordon Fox and Colin Neville, Ruthven, is ten years old, and weighs 1,650 lbs. He is the handsomest horse in Western Ontario. Some of his get from heavy mares weighed 1,700, but the best results are from mares of a lighter type. Some of those shown to-day would be hard to equal anywhere. Perfect in form, light in action, strongly built, compact and graceful, they form the ideal type of a perfect horse. Some of those who exhibited were:

Fred Setterington, Leamington, a two-year-old colt, weighing 1,150; Josiah Peterson, Ruthven, five-year-old, weighing 1,400; Gordon Fox, Ruthven, colt, ten months old, weighing 800; Jason Malott, Ruthven, three-year-old colt, weighing 1,175; Roy Allen, Kingsville, yearling colt, weighing 1,150; Roy Allen, Kingsville, two-year-old colt, weighing 1,265; Geo. Robinson, Leamington, four-year-old mare, weighing 1,500; Wm. Stockwell, Leamington, four-year-old mare, weighing 1,400; Colin Neville, Ruthven, two-year-old colt, weighing 950; Chas. Stockwell, Ruthven, nineteen-months-old colt, weighing 1,210; E. J. Wigg, Kingsville, two-year-old colt, weighing 1,350; Geo. Whaley, Olinda, one pair colts, three and four years old, weighing 2,600; Wm. Martin, Colchester, colt, eight months old, weighing 800.

Coquet 43176 is a beautiful black, and was imported from France in 1898 by N. W. Dunham, of Wayne, Illinois; is recorded by the American Horse Breeders and Importers' Association. Pedigree: Foaled, May 4th, 1896; bred by M. A. Deshayes, Department of Orne, and is now owned by Messrs. Fox & Neville, Ruthven, Ont.; sire Orphelin 35315, by Brilliant 111 11116 (2919), by Fenelon 2682 (38), by Brilliant 1271 (755), by Brilliant 1899 (756), by Coco 11 (714), by Vieux Chasin (713), by Coco 712, by Mignon 725, by Jean Le Blanc 739; dam Lisette 21366, by Fenelon 2682 (38), by Brilliant 1271 (755), by Brilliant 1899 (756), by Coco 11 (714), by Vieux Chasin 713, by Coco (712), by Mignon 715, by Jean Le Blanc (739). Coquet is one of those nice ones that every person likes; weight about 1,600 lbs. He is the sire of more good colts than any horse in America of his age.—[Leamington Post, April 12th, 1906.]

QUESTIONS AND ANSWERS.

1st.—Questions asked by bona-fide subscribers to the "Farmer's Advocate" are answered in this department free.
2nd.—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer.
3rd.—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.
4th.—When a reply by mail is required to urgent veterinary or legal enquiries, \$1 must be enclosed.

Miscellaneous.

RAPE WITH SPRING GRAIN—PROPORTIONS OF MIXED GRAINS.

1. Would it pay to sow rape with spring grain, to be plowed down the next fall?
2. In sowing mixed grain, give the proper proportions and amount per acre?

SUBSCRIBER.
Ans.—Better sow red clover, 12 lbs. per acre.
2. We do not know that there is any particular proper proportion. Oats and barley, half and half, sown two bushels per acre, make a very good mixture. Proportion and amount per acre must still be considered largely a matter of opinion.

WORMEATEN POTATOES.

Last year I planted my potatoes on a piece of old fence ground. I tilled them as usual. When I took them up in the fall, I found there was a little yellowish white worm, about an inch long, in them, and they have eaten them so badly that when they are peeled for use, some are about half cut away. The worms are still alive. Will these potatoes be fit for planting this year, or will I have to buy new seed? I enjoy "The Farmer's Advocate" very much, and would not do without it in the home for twice its price. Wishing you every success.

J. I. W.
Ans.—Unless you see signs of good, healthy "eyes," or sprouts, better get new seed, and be on the safe side.

POINTS OF A LEGHORN.

Would a two-year-old S. C. W. Leghorn rooster, with four points to his comb, make a good show bird, being good every other way? A. E. G.
Ans.—If the Leghorn male is perfect in every other way, but has four points on his comb, the bird would secure 99%, or in other words, the judge can cut for this defect but one-half point. The American Standard of Perfection states that for each extra serration, or for each serration, too few in number, the judge is to cut one-half point, so that other things being equal, the bird with a perfect comb would be a better show bird than the one mentioned, but if the bird with a four-point comb is remarkably good in type, color, shape of comb, etc., he would be a valuable bird for show purposes. He would need to be first-class in every other respect, as the comb is a conspicuous point, and is one that counts more with amateur judges than it does with the men who have been in the judging business for a number of years.

W. R. GRAHAM.
O. A. C., Guelph.

RIGHT TO PROPERTY QUESTIONED.

A young, unmarried man, aged 27, died in Portage la Prairie, Man., on Dec. 28, 1889. He was the possessor of some property. His father, brothers and sisters, and half-brothers and sisters were living in Ontario.

1. Who were his legal heirs?
Ans.—His father claimed and took all the property then, and has recently died in Ontario. The property still remains in the hands of the step-mother and half-brothers and half-sisters, having been willed to them by the father.
2. Can anything be done by the brothers and sisters to recover the property from the second family?
3. If so, what steps should be taken in that direction?
SUBSCRIBER, Ontario.
Ans.—The father and brothers and sisters and half-brothers and sisters all, probably, became entitled at the outset to interests in the property in question; but, as you say, the father claimed and took it all, and it would seem that the brothers and sisters acquiesced, and that the father became entitled to regard the property as his own, and to devise or bequeath it by his will as he did. Therefore, we have to say that at this late date no effective steps could be taken by the full brothers and sisters for the recovery of such property.

VENDOR REMOVING FIXTURES.

A buys farm and buildings from B. Has B, on vacating the same, a right to remove the stopblock and pulley hooks from the car in roof of barn, also the cow chains?

Ontario.
Ans.—B is probably not legally entitled to remove the stopblock and pulley hooks, but apparently has the right to take the cow chains.

LOSS OF IRON DOG—TRESPASS?

A and B are neighbors. Last June A took an iron dog to hew some poles in his pasture; hauled the poles, but left the dog near where he worked, under an old fence, thinking it safe there till he would need it again. When A went for said tool, he found that it had disappeared, and knew that someone carried it off. Some few days ago, A noticed that B had a dog exactly like missing one, and when B was asked if he got said article lost, he claimed a certain blacksmith made same for him. A feels sure that the dog is his, but did not see B taking it. Will you kindly advise through the columns of your paper if A can legally claim said article. The same blacksmith that B said made the dog, has made same for A, but A did not yet ask the blacksmith if he made same kind for B.

2. B plowed a field along A's share of line fence, and hauled stones and piled them along said fence, causing fence to slew to A's side in places, some of the stones also falling over. Can A compel B to remove stones from said fence? N. S.

Ans.—1. A should see the blacksmith, or in some way fully satisfy himself that the dog is his own, and having done so, he would certainly be in a position to claim it for B.

2. B had no right to place the stones as he did, and A should request him to remove same, and warn him, in the event of his refusing or neglecting to do so, that an action of trespass would be brought. This ought to bring about the desired result; but if not, a solicitor's letter might be written B. Actual litigation, of course, to be avoided, if possible.

MARE FAILING TO BREED.

1. Will the yeast treatment, mentioned by J. S., in last issue, do for a mare that will not get in foal? She has missed two years in succession, and was bred to a different horse each year, and both horses are sure foal-getters. I bred her this winter to get early colt, and she came back at nine weeks. I bred her again two weeks ago. If she comes back again, what will be advisable to do?

2. Thoroughbred filly, one week old, got diarrhoea; was feeding mare a bran mash twice a day when foal got diarrhoea. I stopped mashes, and fed oats and bran dry. What is best to give to stop it?

3. What is advisable to give Hackney stallion to make him eat when he is exercised? He does not feed well. He will not eat over three half pints of oats at a meal. Is gentian good, and how much should one give at a feed, and how often?

4. What is best to feed horses on pasture before green feed is ready? How is hay once a day? W. M.

Ans.—1. We would advise having her examined when next in heat, and the os, or opening of the neck of the womb, expanded with the fingers. The yeast treatment might be tried at same time, as it is not likely to do any harm. Then let her have a run on grass every day, and breed her the next time she is in season.
2. The bran mashes probably caused too large a flow of milk, and the foal took too much. Anything tending to relax the bowels of the mare will have the same effect on the foal through the milk. If diarrhoea continues, give a tablespoonful of castor oil, and milk the mare, leaving only a little for the foal, till purging ceases.
3. Gentian is a bitter tonic for the stomach and system in general, and is used in nearly all condition powders for animals that do not feed well. One tablespoonful is a dose for a horse twice a day, given with feed, or placed well back on the tongue.
4. Good clean hay, and a light feed of oats, with two quarts bran.

POULTRY AND EGGS

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

AI BARRED ROCKS exclusively. Our winnings at Guelph: First pullet, special for best pullet and special for best female. At Detroit: First pullet, second cockerel, second cock, and special for best shaped male. Mating list free on application. Eggs from \$2 per setting up. Jno. Pringle, Proprietor, London, Ont.

A BARGAIN—Thoroughbred, prizewinning, Rose-comb Silver-spangled Hamburg and White Wyandotte eggs, one dollar per setting. Heimbecker's Poultry Yards, Hanover.

BUFF ORPINGTONS. Eggs \$1 per 13. S. G. Meales, Brantford P. O., Ont.

BARRED ROCKS. Eggs from choice exhibition matings. Grand imported cockerel heading every pen. Write for full particulars before buying elsewhere. W. W. Dods, Alton, Ont.

BUFF ORPINGTONS—Eight breeding pens; low-set, blocky type, heavy laying strain; trap nest used; 9 years breeding; high-class exhibition matings. Incubator eggs a specialty, \$5.00 per 100. Illustrated catalogue free, giving winnings and prices of matings. Write at once. J. W. Clark, President Orpington Club, Cainsville, Ont.

BUFF and White Plymouth Rock and White Wyandotte eggs, Hawkins strains, \$1 per 15. P. C. Gosnell, Ridgetown, Ont.

BARRED ROCKS, Buff Orpingtons—Eggs, \$1 for 15; \$1.50 for 30. S. L. Anderson, Crossland, Ont.

BARRED ROCKS exclusively. Eggs \$1 setting. Fred Auston, Brighton, Ont.

BARRED ROCKS exclusively. Eggs for hatching, \$1 per setting, 3 settings \$2. W. J. Campbell, Snelgrove, Ont.

BUFF ORPINGTONS exclusively. Eggs from fine colored, blocky females. Mated with solid Buff cock weighing 10 lbs. One dollar per fifteen; five dollars hundred. Hugh McGregor, Caledonia, Ont.

CHOICE Barred Plymouth Rock eggs from hens selected for their perfect barring, size and persistent laying qualities, having run of orchard, mated with A1 vigorous cockerel, "National strain." Price, \$1 per 13, or three settings for \$2. W. C. Shearer, Bright, Ont.

EGGS for setting from imported Light Brahma pullets (Salch & Brown strain) mated with an imported cockerel (Shaw strain), \$2 per 15. A. Micht, Derry West, Ont.

EGGS from prizewinning pens Barred Rocks (Hawkins), Buff Wyandottes (Barlett), Buff Orpington (Clark), \$1; \$5 per hundred. Mammoth Pekin ducks, White Holland turkeys, \$1.50. Guarantee every egg a chick. J. B. Cowieson, Queensville.

EGGS FOR HATCHING and stock for sale of the different varieties—Barred Rocks, White, S. L. and Partridge Wyandottes, also Buff Orpington—at \$1 per 13 eggs. Imperial Pekin duck eggs, \$1 per 9 eggs. Mammoth Bronze turkey eggs, \$2.50 per 9 eggs. Stock A1. D. A. Graham, Wanstead.

EXTRA choice pure Barred Rock eggs for sale. Price, one and two dollars per setting. A. S. Werden, Anequia Farm, Bethel, Ont.

EXHIBITION Buff Orpingtons—Winnings at Eastern Ontario, March 1905: Every prize except third cock. Eggs, \$5 per 15. A. W. E. Hellyer, Ottawa South, Ont.

EGGS from prizewinners—Barred, Buff, White Rocks; White Wyandottes; Black Minorcas; White, Brown, Black, Buff Leghorns; Houdans; Silver-spangled Hamburgs. Settings, \$1. R. Laurie, Wolverton.

LAYERS, great payers, prizewinners; won over 300 firsts at seven shows, including Ontario. Eggs, per setting, \$1, or \$5 hundred, from Barred and White Rocks, White and Silver-laced Wyandottes, Brown and White Leghorns, Black Javas and Buff Orpingtons. Black Orpingtons and Blue Andalusians, \$2 per setting. F. W. Krouse, Guelph.

LITTLE chicks shipped any place from pure S. C. Brown Leghorn, W. Leghorn, White Wyandotte, White and Barred Rock. Also manufacture best brooder on market. Circulars, Box 30, C. A. Thompson, New Washington, Ohio.

MAMMOTH white turkeys and Pea fowl. Eggs, thirty cents each. H. C. Graham, Ailes Craig, Ont.

RHODE ISLAND REDS (rose comb). Bred seven years from carefully-selected heavy winter layers. Large brown eggs. Good hatch guaranteed. Fifteen eggs one dollar half. Jno. Luscombe, Merton, Ont.

SELECTED LAYERS—Imported Buff Orpingtons, Martins White Wyandottes mated with Dustons, Hawkins Barred Rocks mating Boyces'; \$1 per 15; \$5 per 100; fertility tested Callanan Bros., Haysville, Ont.

SUPPLIES and books on all kinds of poultry—pigeons, pheasants, birds, dogs, cats and rabbits. Catalogue free. Morgan's Incubator Works, London, Ont.

TRY Valley Mills' Poultry Farm for 90% fertile eggs from best laying strains S. C. W. Leghorns in existence. Eggs \$4.50 per 100, \$1 per 15. E. C. Apps, box 224, Brantford, Ont.

WHITE Wyandotte eggs. Pen direct from Dustons—all \$5 birds—\$2 per setting. Burt, Paris, Ont. Eggs, \$1 per setting. E. W. White Wyandottes, the popular business bred, Duston strain. W. D. Monkman, Bond Head, Ont.

WHITE Rock eggs for hatching, \$2 per 15. Good hatch and satisfaction guaranteed. Geo. M. Shephardson, Somers, Ont.

WHITE Wyandottes exclusively. Strongly fertilized eggs from heavy laying Martin and Duston strain one dollar per fifteen. Five dollars per hundred. Daniel Y. Green, Brantford.

223 EGGS per hen.—I breed for eggs, and use trap nests throughout. White Rocks exclusively. Eggs \$2 per 13. W. B. Winters, Carleton Place, Ont.

187 EGG STRAIN Buff Orpingtons. Bred from England's greatest layers. Five years' experience breeding and importing. \$1 per 15; \$5 per 100. Everard Brown, Haysville, Ont.

MEN WANTED to advertise and introduce our stock and poultry compounds to farmers and dealers. Work during spare time or permanently. This is an exceptional opening for a hustler. Write for particulars.
GOLDEN CREST CO., London, Can.

48 Bathurst St., London, Ont.

ATTENTION! POULTRYMEN.

The choicest prizewinning birds from the best strains of any variety of Wyandottes. Only high-class birds for sale. Address:
JAMES HOULTON, GREAT MALVERN, ENGLAND, or **S. HOULTON, CALGARY, Canadian Representative.**

Single-comb Brown Leghorn Eggs, \$1 per setting, from choice prize stock. A fine lot of Yorkshires, imported and home-bred, all ages; also a grand young Shorthorn Bull. **W. J. MITTON, Thamesville Sta. & P. O. Maple Park Farm.**



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

ALBERTA lands for sale by Fetherstonhaugh & Tobin, Leduc, Alta.

ALBERTA lands for sale. Many good bargains. Write to-day. Patmore & Jamieson, Calgary, Alta.

BEST bargains in Parry Sound District. Greatest bargains in Ontario. Send for list. Jno. Carter, Sunndridge, Ont.

FOR SALE—"Standard" Sheep Dip. \$1 per gallon. Strong and effective. West Chemical Co., Toronto.

FOR SALE—A large number of select Delaware farms, beautifully located. Write for free catalogue. C. M. Hammond, Real-estate Broker, Milford, Del.

FOR SALE—Thirty or forty thousand spruce trees, 2 feet, 10c each—smaller, less—larger, more. Scotch fir, Austrian pine, and arbor vitae cedars, juniper trees (various kinds), fruit and shade trees, flowering shrubs, roses, clematis, etc. All flowering plants. C. Baker, London Nursery, Ridout Street South.

FARM to rent in Red River Valley—640 acres all fenced; 300 in cultivation; good buildings, good water, plenty of wood; within three miles of railroad station. Tenant must provide all his own equipment. Long lease to satisfactory tenant. Apply Box 44, Farmer's Advocate, Winnipeg, Man.

FOR SALE—"Standard" Cattle Wash kills lice, etc. Imperial gallon, one dollar. West Chemical Co., Toronto.

I WILL sell Belvoir—Silver medal farm of the Province. About 300 acres pasture on the noted Delaware Flats; 100 arable. Will grow anything that can be produced in the Province, but peaches. Corn, wheat, tobacco, hops, etc. Further particulars, address Richard Gibson, Delaware, Ont.

IMPROVED farms for sale in the Edmonton district. Candy & Co., Edmonton, Alta.

NEW country just opened, the best in Alberta. Land for sale from seven dollars up. Red Willow Investment Co., Stettler, Alberta.

WESTERN farm lands for sale. Correspondence solicited. McKee & Demaray, Regina, Sask.

WANTED—MEN—Railroads in Canada, passenger brakemen, firemen, electric motor-men, conductors. Experience unnecessary. Particulars for stamp. Dept. 75, Inter. Ry. Inst., Indianapolis, Ind., U. S. A.

99 PER DAY selling the "Auto-Spray." Best automatic hand sprayer made. Sample machine free to approved agents. Cavers Bros., Galt.

IVY POISONING—FEEDING CHOP WET OR DRY.

1. What is the best cure for ivy poisoning?
2. Is it better to feed a cow's chop ration wet or dry?

R. O.
Ans.—1. To a rather weak grade of alcohol, say 50 to 75 per cent., add powdered sugar of lead till no more will easily dissolve. Rub the milky fluid well into the affected skin, and repeat several times during the course of a few days. The itching is at once relieved, and the spread of the eruption checked. Remember that the lead solution is very poisonous if taken inwardly.
2. We prefer feeding meal dry. If cut feed, such as chaff or silage, is used, dump the meal on top of it.

QUESTIONS AND ANSWERS. Miscellaneous.

PIGS COUGHING.

I have a bunch of pigs that do a considerable amount of coughing. The stable is not extra warm, and has a cement floor. What could be done for the pigs to cure the cough? C. H. K.

Ans.—Keep them well bedded, and clean the pen every day. If possible let them run outside now that the weather is fit. If they could be kept outside altogether, and provided with a warm sleeping place, it would be well.

CURING PORK—HEAVES.

1. Would you kindly give me a recipe for curing hams and shoulders for summer meat, so they would not be too salty or hard?

2. Valuable horse has been troubled with heaves off and on for six months. What will cure him? J. R. K.

Ans.—1. As there is plenty of time before next pork-curing season, we leave this question open, with an invitation to readers to contribute their experience.

2. He cannot be cured, but the trouble can be mitigated by being careful to limit his hay allowance. Avoid overloading the stomach with bulky feeds. Sprinkle all hay with lime water a short time before feeding to lay the dust. It is said that horses with heaves, sent to the Northwest, seem to get rid of the affection.

GROWING ASPARAGUS.

Will you kindly direct us the best way to plant asparagus, as to the depth and distance, also the care of an old bed in regard as the amount of salt required, etc. D. C.

Ans.—Asparagus plants should be set out early in the spring, as soon as the ground is fit to work. The ground upon which they are planted should be thoroughly prepared beforehand, as the bed usually becomes more or less of a permanent plantation. There are a variety of opinions as to the proper distance for planting. A good plan is to set in rows, three or four feet apart, for convenience of cultivation, and if it is desirable to cultivate both ways, the plants may be set three or four feet apart in the row; but for economy of space, it might be better to plant, say, two feet apart in the row. This will allow for good development of the plants, and, at the same time, fully occupy the land. The depth to which plants should be set may vary according to the nature of the soil. On light, sandy soil, it is well to plant deeper than on heavy soil to guard against injury from drought. Some advise planting part of the plantation shallow, and the rest deeper, in order to have the shallower plants come on earlier in the spring. On an average, the plants are set with the crowns four or five inches below the surface. The plantation should not be cropped for one or two seasons after planting, and good cultivation should be given throughout the season to keep down weeds and encourage vigorous growth. At the end of the season, after the tops died down, they should be cut and burned. It is well to make a liberal application of barnyard manure every year or two to keep up the fertility of the soil. The best time to apply this is after the last cutting of the crop, early in the summer. At this time, the manure may be worked into the soil, which stimulates a vigorous growth of top, and the storing up of plant food in the roots for the formation of large sprouts next spring. The plan so frequently adopted of applying a heavy dressing of manure in the fall is objectionable, as it tends to retard growth of plants in the spring, and makes the crop unnecessarily late. The plants are perfectly hardy, and require no protection of this kind.

Salt is not at all necessary as a fertilizer for asparagus; in fact, it contains very little of fertilizing material. From the fact, however, that the plants grow naturally along the sea shore, they will stand more salt than most other kinds of vegetation without injury. Probably the chief value of salt in an asparagus plantation is that it will kill out many kinds of weeds and other vegetation without injury to the asparagus.

H. L. HUTT,
Ontario Agricultural College.

PAINT FOR BRICKWORK.

Please publish in "The Farmer's Advocate" a cheap and durable paint for brickwork. ENQUIRER.

Ans.—Good paint, such as is used for woodwork, is most commonly in use. The oil should be of good quality. The color will depend upon your own taste. Be particular that the wall is perfectly dry when applying the paint.

SHARE FOR HARVESTING HAY CROP.

What share is usually given in taking off a hay crop, the parties getting the crop to do all the work? J. S.

Ans.—It must depend upon the stand and character of the growth, price of hay, etc. On an ordinary crop of 1½ tons per acre, 25 per cent. should be a fair recompense for harvesting. In all such cases, calculations should be reduced to a basis of cash value for labor, etc., and each problem calculated accordingly.

RAPE CULTURE.

1. What time should rape be sown for a pig pasture?

2. Is there anything that can be sown with it to improve it for pasture?

3. How much seed for one acre?

4. At what stage of maturity should it be when pigs are let on to it. J. C. A.

Ans.—1. Rape may be sown almost any time from April to July, and give a fair amount of pasture during the season. Where early pasture is required, it is best to sow the rape early in May. The crop may usually be pastured in from 6 to 8 weeks from the time it is sown, though it may not have attained its full growth.

2. We have never made a practice of sowing anything with rape, and I doubt whether much will be gained by doing so. Rape is such a leafy plant that it is likely to crowd out other plants that may be sown with it.

3. For pigs, I would prefer to sow the rape somewhat thickly, as pigs do not care for coarse stocks. About three pounds per acre would be quite sufficient.

4. Rape usually has its highest feeding value about the time the tips of the leaves begin to turn purple. If required earlier than this, however, the stock can be turned upon it sooner. In pasturing rape with pigs, I think it is preferable to use hurdles, and give them a comparatively small piece at a time so that they do not waste so much by tramping. In this way, a person can start pasturing when the rape is comparatively small, and the growth of the crop outside the hurdles is not interfered with. G. E. DAY,
Ontario Agricultural College.

RAISING ALSIKE CLOVER SEED.

I have a number of acres of alsike clover that I intend saving for seed this season. I pastured the same up to late last fall, but it is coming out nicely this spring again.

1. Would you advise pasturing again this spring? If so, to what extent?

2. Does pasturing give more and better sample of seed?

3. Does pasturing help to destroy upshot timothy and fowl seeds? C. L.

Ans.—1. It may be advantageous to pasture it for a time, especially on soil and in seasons when an overgrowth is to be feared. The energies of the plant are thus directed from the overproduction of stems and leaves to the production of seed. The pasturing should be close as long as it is continued to secure uniformity in the subsequent development of the crop.

2. From what is stated above, we should judge so, but the yield depends much upon the presence of bees in the near neighborhood, which play an important part in mixing the pollen and fertilizing the blossoms. A case was reported to "The Farmer's Advocate" from Halton County, where two brothers, having 40 acres of alsike, intended for seed, concluding that with so much of this pasture near home, the bees would not reach theirs, pastured it so as to throw it about two weeks later in maturing, with the result that they had an extra good crop of seed, while fields between theirs and those nearer the bees yielded no seed.

3. It is doubtful. The best way to obviate that difficulty would be to run the mower high over the field. If it is found the stock has not done the work.

NITRATE OF LIME.

Kindly let me know where I could get nitrate of lime? SUBSCRIBER.

Ans.—Write the German Kali Works, New York City, mentioning "The Farmer's Advocate." If they cannot supply you, they can put you on track of it. Nitrate of soda can be had from the Canada Chemical Co., of London, Ont.

BLUESTONE.

Will you kindly tell me, through "The Farmer's Advocate": 1. Where is bluestone manufactured? 2. If in Montreal, what firm handle it wholesale? W. W. G.

Ans.—1. Nichole Chemical Co., New York City.

2. It is not made in Montreal, but the Canada Paint Co., Montreal, handle it wholesale. You can also obtain it in barrel lots from the Spramotor Co., London, Ont.

SEED GRAINS AND VETERINARY BOOK.

1. Can you tell me where I could get the Little Gem short-straw Crown peas, or the White Wonder peas, and also the Joannette oats?

2. Where can I get a good doctor book for stock? J. M.

Ans.—1. Look up the advertisements of farmers and seedsmen offering seed grains for sale in recent issues of "The Farmer's Advocate." If none specify the varieties you want, then write the seedsmen who advertise.

2. "Veterinary Elements," by Dr. A. G. Hopkins, \$1.10, postpaid; can be ordered through this office.

LINE FENCING MATTERS.

1. Is a stump fence a lawful fence, where it is well built and suitable to turn stock of all kinds?

2. What steps would I take to make my neighbor build a lawful fence where it is not a lawful fence?

This stump fence is a line fence. Ontario.

Ans.—1. The matter is one which is usually regulated by municipal by-law, and you should, accordingly, see the clerk of the municipality about it.

2. If you cannot arrange the matter satisfactorily with your neighbor direct, call in the fenceviewers of the locality and have them arbitrate, and make an award respecting it.

VETERINARY DIPLOMAS—THE FRENCH-CANADIAN HORSE.

1. Is there any college or school in Canada that gives a veterinary course by mail? If so, give name. Can a person be granted a diploma by such an institution?

2. What is the matter with the French-Canadian as a general-purpose horse? HUNTINGDON.

Ans.—1. Write Canadian Correspondence College, Toronto, Ont., whose advertisement you will find on page 652, April 19th issue of "The Farmer's Advocate." They do not appear to include a veterinary course, but you might write them, asking. Diplomas might be issued, but would give you no legal status, and you would be liable to prosecution for setting up as a veterinarian. If you desire to enter that profession, the proper way is to take the regular course at an institution like the Ontario Veterinary College.

2. The principal thing is that he is hard to find, if, indeed, he can be found at all. The French-Canadian horse of fifty years ago was an exceedingly useful general-purpose horse, full of energy and endurance, strong for size, and a rapid road horse. It is very regrettable that the breed was not maintained in its purity, but so much mixing of breeds

has taken place that very few pure-breeds are available, though, we believe, a register is yet maintained for the breed.

Veterinary.

PROBABLY TUBERCULOSIS.

Cow, five years old, scours, is very thin in flesh, eats well, has a great desire for drink, hair looks dry, is constantly rubbing herself. Have been feeding cut cornstalks, hay and chopped oats. What is the trouble? P. B. H.

Ans.—Would advise you to have her tested for tuberculosis. If she does not react, would then advise treatment. R.

EVERSION OF THE UTERUS.

A valuable Holstein cow, three years old, dropped her second calf ten days ago, and almost immediately expelled the uterus; had it replaced, and after following treatment prescribed for such cases, she gradually improved. She is eating fairly well now, but is giving some 14 lbs. of milk per day less than she did with first calf. Do you think she can be brought up to her former flow of milk? She is increasing only very slowly. Would it be advisable to breed her again, and is she more liable to have a recurrence at next calving? Any information as to how best to treat her will be very much appreciated. J. C. C.

Ans.—Would consider your cow doing very well in the length of time. Feed good, nourishing food, and have patience. You should be satisfied if she came up to usual milk flow in six weeks. She would be more liable to a recurrence, although numbers of such cows are bred again and no trouble experienced, but unless she is a very valuable cow, would not recommend breeding her again. She should not be bred again for say three months, in order to recover health and strength. R.

MANY DEAD FOALS.

Could you give any reason why there are so many dead foals this season, as I have one well-bred mare which foaled on April 16th, inst., but foal was dead. Mare had had good care all season, being regularly fed on mixed hay and rolled oats, morning and noon, with boiled barley at nights. Had a good stable with lots of room and light; her allotted time to foal being April 19th. Would you consider it a case of abortion, or not, as the foal was fully matured? Would it be safe to breed her again in about four weeks' time, or about that time?

Ans.—We have no knowledge of more dead foals coming than usual percentage. Of course, there are, perhaps, more mares with foal this spring than usual, and consequently there will be more deaths. Would not consider yours a case of abortion, and would deem her safe to breed again. Do not consider your case due to any particular wrong. It is just one of the risks that all breeders must take. R.

"During the long French war, two old ladies in Scotland were going to the kirk. The one said to the other: 'Was it no a wonderful thing that the Breetish were aye victorious in battle?'"

"Not a bit," said the other, "dinna ye ken the Breetish aye say their prayers before gain into battle?"

The other replied: "But canna the French say their prayers as well?"

The reply was most characteristic: "Hoot! sic jabberin' bodies, wha could understand them, if they did?"

More Beet Acreage Offered Berlin Than the Factory Can Accept.

Notice is hereby given that Berlin's beet acreage is closed at the maximum at what it is advisable to have. To accommodate old growers who may have neglected to renew, and to allow present contract-holders to protect, by contract, acreage they intend sowing in excess of their present contracts, acreage books will not be finally closed till Sat. eve., May 12, at 5 o'clock.

The Ontario Sugar Company, Limited.

Opportunity Knocks

At any moment the opportunity of your life may present itself. When it comes, you would like to be ready to grasp it. If you learn now to do things by investing your spare moments in the Bank of Education, when the time comes you will

Be Ready to Respond

Hundreds are availing themselves of our aid, and are utilizing their leisure time to better their education. Be guided by their example, and qualify yourself to grasp the opportunity that will surely come. Nothing can be gained, much may be lost by delay. Use this coupon to-day.

CANADIAN CORRESPONDENCE COLLEGE, Limited

161 Bay St., TORONTO, ONT.

Gentlemen:—Please send me full particulars as to how I can qualify for the position marked 'X' in list below or written on the extra line at bottom.

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| Ch'ed Accountancy | Household Science |
| Complete Commercial | Nature Study |
| Bookkeeping | Special English |
| Shorthand and Typewriting | Public School Course |
| High School Course | Matriculation |
| General Agriculture | (Sr. and Jr.) |
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To Teachers: We prepare you for any examination in any Province of the Dominion. Ask us for information.

Extra Line.....
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BRANTFORD

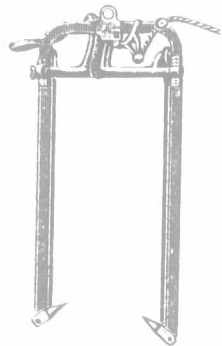
Second Annual Open Air HORSE SHOW

MAY 24th, 25th and 26th, 1906.

\$2,500 in Prizes

The Telephone City's Show Grounds, etc., are unexcelled. First-class stabling for 250 horses. Send for Prize List.

W. T. Henderson, Sec.-Treas. BRANTFORD, ONT.



THE OSHAWA HAY CARRIERS SLINGS AND FORKS,

The latest and best. Agents wanted in unrepresented territory.

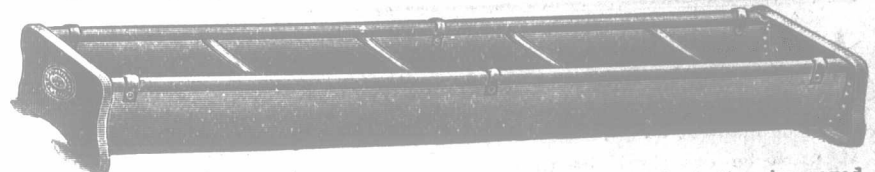
THE OSHAWA HAY CARRIER WORKS South Oshawa, Ont.

"Valor consists in the power of self-recovery."—Emerson.

GOSSIP.

H. Carell & Son, Cargill, Ont., report recent sales of Shorthorns as follows, viz.: To John Kearns, Palmerston, Ont., Golden Rex, a bull of the right stamp, low, wide and thick, out of the Brawith Red cow, Golden Hope (imp.), and sired by the Roan Lady, Marr-bred bull, Diamond Rex (imp.), a son of the famous Bapton Diamond; to Henry Needham, Pakenham, Ont., a son of Diamond Rex, out of Rosewood 66th (imp.), one of Mr. Bruce's favorite families. This is a good bull, smooth and true in his lines, and, if properly cared for, will do lots of good in his new home. To L. B. Powell, Wallenstein, Ont., a trio of choice animals, consisting of Lord Mysie, a typical Scotch type, thick, smooth and right down on the ground, out of Beauty 20th (imp.), a daughter of the Marr Goldie bull, Golden Gift (61166). His sire was the Duthie-bred Missie bull, Lord Mistletoe (imp.), sired by Lovat Champion, out of Mistletoe 3rd. Second comes Amaranth G 4th, a beautiful dark red heifer, out of the Duthie-bred Amaranth cow, Sittytan Amaranth 4th (imp.), a daughter of the Missie bull, Chief of the Clan, and out of a daughter of William of Orange. Golden Drop Victor, our chief stock bull for some years, sired this heifer, and she will do him credit, notwithstanding the high standard set for him. Choice Lady, a good roan and a quality one, completes the trio. She is out of Pretty Lady (imp.). Her sire was Choice Koral (imp.), of the Shethin Kora family, and a good one. W. A. Begg, of Tiverton, Ont., took, one might say, a miniature herd, at any rate, the foundation for a large one, and if careful selection counts for anything, we predict a future for him in Shorthorn annals. He bought the four heifers, Carrie C, Daisy C, Princess C 2nd, and Clara F. C. 2nd, the three former reds, and the latter pure white. Carrie and Daisy were sired by Lord Mistletoe (above mentioned); Princess, by the Duthie-bred bull, Golden Drop Victor. Clara F. C. was sired by the Duthie-bred Merchantman, a Missie, and a son of Lovat Champion; his dam was by the great Scottish Archer, and grandam by William of Orange. Carrie C is out of Carrie (imp.), a daughter of the Crombie-bred bull, Janissary (74761), out of Emily, by Monticello, a Marr-bred Missie, by William of Orange; Emily, out of Lady Corday, by Mandeville, a Marr-bred Marigold, also by William of Orange. Daisy C. is out of Daisy (imp.), by a son of Prince of Fashion. Daisy's Dam was Dewdrop, by Mountain Bard, bred by Mr. Manson, of Kiblean. Mountain Bard was by the Cruickshank bull, Touchstone, a son of Gondolier, out of Sunflower, by Roan Gauntlet. Princess C 2nd, out of Princess (imp.), a great breeder and a very heavy milker, bred by Mr. Durno, of Jackston, sired by Prince Charlie, a son of the Marr Missie bull, Musgrave. Princess' dam was Marigold, by the Duthie-bred son of Royal Star (58082), Locksley (66849). Clara F. C. 2nd, the white one, with the hair, thickness and quality we all look for, is out of Clara F. 3rd (imp.), sired by Cock a' Bendie, a son of the Rosewood bull, Dest Mahomed; dam Clara F. 2nd, a daughter of the Butterfly bull, Earl of Netherdale, by the Cruickshank bull, First Consul, his dam by William of Orange. George Amos & Son, Moffat, Ont., selected the yearling bull, Red Rex, to replace the great bull, Old Lancaster, which they have been so unfortunate in losing quite recently. In the capable hands of these experienced men, we expect to hear more of this bull, as he has the strong constitution necessary to stand fitting, together with the qualities and conformation required in the make-up of a show animal. He is out of Roan Lady 10th (imp.), and sired by Diamond Rex (imp.). It will be remembered that Bapton Diamond (Mr. Hanna's 1,000-guinea bull) made a great record for himself some years since on Roan Lady cows, the calves from this cross making very much the greatest average at the sale of that year. In this case, we have this cross intensified, as Diamond Rex was sired by Bapton Diamond, and out of the Marr-bred Roan Lady 37th (imp.), and he, in turn, used on another Roan Lady. J. E. Meyer, of Gourock, Ont., purchased a nice pair in the bull, Bellman, a red son of Merchantman (imp.), and Bellona 3rd (imp.), by the Duthie bull, Count St. Clair, of the Marr Clara family, a son of

"Tweed" Steel Troughs



Your ear, please—for 1906. The "Tweed" Steel Hog Trough made better, improved much, finished slicker, and the price reduced. "Quality up and price down." How is it? That magic word, "machinery," explains it. We have allowed no expense to hinder us making a perfect article at a low price. 50c. per ft.—we should have more—50c. is even money, and it goes. It's the price you wanted. Send order and money, and we do the rest. Every trough guaranteed.

THE STEEL TROUGH & MACHINE CO., Limited, Tweed, Ont.



CORN

Shelled
SELECTED
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Tests 85%
Germination.

	bush.
Imp. Leaming	1.00
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Pride of North	1.00
Mth. Southern	1.00
Sweet	1.00
Compton's	1.00
Longfellow	1.00
North Dakota	1.00
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Buy your corn on the cob and be sure of a crop. Leaming, White Cap, Compton's Early. Per half-bushel crate, 90c.

GEORGE KEITH, SEED MERCHANT, TORONTO, CANADA.

DIDSBURY FARM LANDS

A SAMPLE OF WHAT WE HAVE

390 acres, level land, partly fenced; some improvements; good spring; within 1 mile of store, creamery and post office. This is only a sample, we have scores of others. Write us for full particulars of Alberta Lands.

COLLISON & REED, Didsbury, Alta.

Special Offer

For Sale: The Famous Stock Bull, Full Bloom of Hindward (16936), Imp.

This is an excellent chance for anyone requiring an imported bull to head their herd with, at a Canadian-bred price. We have had this bull now for the past three years, and his qualifications as a good stock-getter are shown by the number of his calves now in use throughout Canada and the United States, also by his repeated successes in the show-ring. His career, in brief, is as follows: He was dropped in March, 1900, and was imported by us in 1903. In 1902 he won first at Ayr and Kilmarnock, the two principal show-rings in Scotland for Ayrshires. In 1903, at Three Rivers, he won first and diploma for best male any age, and at Sherbrooke, in the same year, he won first in aged class, and sweepstakes for best Ayrshire male. A good sire is the first step towards improving your herd, and here is your opportunity. We will offer this bull to the first bidder at the low figure of \$300. We are also offering a choice lot of young calves, sired by this bull, and out of some of our best dairy cows, at rock-bottom prices. Cheapness usually implies poor quality, unless there are reasons, and in our case there are many: 1. There are no culls kept, and, in consequence, our cows are all sure breeders, and so we have always a lot of calves for sale. 2. We breed more pure-bred Ayrshires than any other Canadian breeder, and so can afford to sell cheaper. 3. We have an exceptionally big crop of calves this year, and so must get rid of some of them to make barn room. Our specialty is foundation stock. Give us a trial, and you will be well pleased with the result. For fuller particulars, write at once to

MELVILLE GREENSHIELDS, Isaleigh Grange Farm, Danville, P. Q.

Advertise in the Advocate

the Victoria bull, Count Arthur, and a red and white daughter of the Duthie-bred Mayflower cow, Moss Rose 2nd (imp.), named Moss Rose 8th, sired by the Missie bull, Lord Mistletoe."

TRADE TOPIC.

THE MELOTTE SEPARATOR.—There is no piece of machinery in common use where good construction and good material are more essential than in a cream separator. The Melotte Cream Separator is the embodiment of these ideas. It has fewer bearings, simpler bearings, and, it is claimed, better-oiled bearings than any other separator on the market. It is constructed in every detail upon simple mechanical principles by experienced mechanics, using modern machinery and the best materials. It is a separator built to give satisfaction. Drop a post card, asking for a descriptive catalogue of the Melotte Cream Separator, to R. A. Lister & Co., Limited, Montreal, Que.

A RELIABLE POTATO HARVESTER.—We are pleased to call attention to the advertisement of the Hoover potato-digger which appears in this issue. The Hoover digger has for years been recognized as the highest type of potato-harvesting machine. We do not know that there is a claim made that there is anything better. Potato-growers have learned that in raising potatoes on a large scale they must have a better way of harvesting than to dig them with the hoe. They can dig them with a hoe, but so they can mow all their grass with the scythe. A potato harvester is as essential to the potato-grower as the mowing machine is to the haymaker. The best way for a potato-raiser to appreciate this is to start in to harvest his crop with the old reliable Hoover digger. It gets them all, puts them on top of the ground, tops in one row and potatoes in another, and makes fast work of it. It is manufactured by the Hoover-Prout Company, Lock Box 33, Avery, Ohio, who will be glad to send descriptive catalogue and all particulars to anyone writing them.

American Fence Talks

AMERICAN FENCE is standard of the world. More miles of it are in use than all other fences combined.

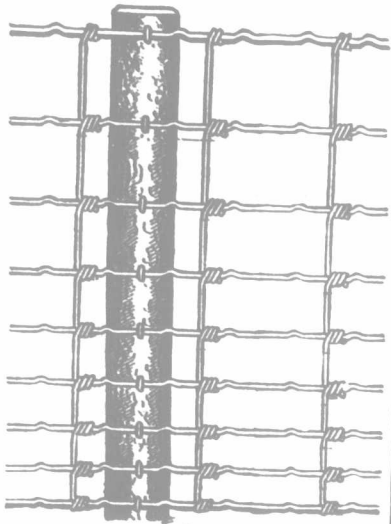
It is made of steel that is exactly fitted for it. A woven-wire fence can be made of wire too soft or too hard.

It must be exactly right to render good service.

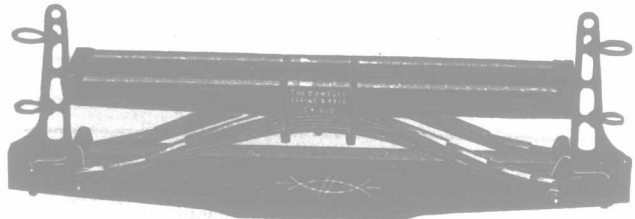
The structure of the American Fence is perfect. It is built of big, solid, galvanized wires, all No. 9 gauge if you prefer it, with the upright or stay wires hinged; in all heights and for all purposes.

American Fence and Gates are for sale by dealers everywhere, or write us direct and we will send you a catalogue free, and tell you where you can get the fence and save money.

Manufactured by
The Canadian Steel & Wire Co., Limited,
HAMILTON, ONTARIO.



CHATHAM BOLSTER SPRINGS



AS THEY APPEAR WHEN MOUNTED.

Make a farm wagon a spring wagon, and no farmer can afford to be without them. They take away the "jars" and "jolts," making it easier for the horses and the man.

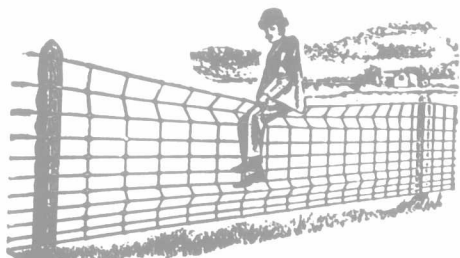
Make the life of the wagon much longer and look better, and the cost is small.
MADE ONLY IN TWO LENGTHS.
40-inch Bolster will adjust to 38, 39 and 40.
42-inch Bolster will adjust to 40, 41 and 42.

Capacities from one thousand to ten thousand pounds. Price on application.

MADE BY
DOWSLEY SPRING AND AXLE CO., LTD.,
CHATHAM, ONTARIO.

Sit On It, You Can't Hurt It!

THE HINGE-STAY



is what gives Dillon's Fence its superior durability and strength. Just study the above picture. It tells a story. Other locks and stays slide, rust, break and bend, but the **DILLON HINGE-STAYS** remain absolutely the same under the most rigid tests. The Dillon Fence never sags—is always tense and neat. It improves the appearance of your farm, and gives you no annoyance. Made of extra quality, highly-carbonized coiled steel wire, each strand having a tensile strength of from 1,300 to 2,300 pounds, according to the size of the wire. Write for free illustrated booklet and estimates. Still some territory for good agents.

Owen Sound Wire Fence Co., Limited, Owen Sound, Ont.

Sharples TUBULAR CREAM SEPARATORS

We want you to know Tubular Cream Separators as they are

Investigate the low can and enclosed gears. Tubulars have neither oil cups, tubes, nor holes—they oil themselves. They have bowls without complicated inside parts—hold the world's record for clean skimming, durability, capacity, easy turning and easy washing—save half the work—greatly increase the amount and quality of butter—are wholly unlike all other separators. Write for catalog R-193.

Toronto, Can. **THE SHARPLES SEPARATOR CO.,** West Chester, Pa. Chicago, Ill.

QUESTIONS AND ANSWERS. Miscellaneous.

STEAM PLOWING AND NORTHWEST LANDS.

Is there any book which you can recommend re the Northwest, which treats on the following: Plowing by steam, choosing land, which are the most desirable districts, seeding, cultivation, etc., which may be ordered through your office? If so, kindly state price.

Ans.—We do not know of such a book, but would suggest that the querist write the Immigration Branch, Department of the Interior, Ottawa, for literature dealing with lands in the provinces of Saskatchewan and Alberta; also subscribe for "The Farmer's Advocate" of Winnipeg.

SEEDS FOR LOW LAND.

I have a lot of land—a sort of clay loam, mixed with black muck—which has a pan bottom that holds the water too much, and out of which clover heaves up, and does not prove satisfactory. Not being able to drain it at present, I wish to seed down. What mixture of grasses would you advise to make good hay or pasture, grasses which may be easily broken up and got out of ground when needed?

A YOUNG FARMER.
Ans.—It would probably be difficult to get very satisfactory hay or pasture crops from the land described. I would recommend trying a mixture of red top, with a small amount of timothy and orchard grass, using eight pounds of red top, three pounds of timothy, and three pounds of orchard-grass seed per acre. If he has not already tried alfalfa on the land, it would be wise to add two or three pounds of this, as it would certainly give good results on such land, if not winter-killed.

J. BUCHANAN,
Experimental Dept., O. A. C., Guelph.

GOSSIP.

The Lincoln Long-wool ram sale, by members, is advertised in this paper to be held in Lincoln, England, August 3rd, and September 7th, and is limited to 400 rams.

A NEW SHORTHORN MILK RECORD.

The pure-bred Shorthorn cow, "Florence Airdrie VI," owned by the Nebraska Experiment Station, has just completed a milk-and-butter record which is a leader for cows of this breed. She produced between April 7, 1905, and April 7, 1906, 10,487 pounds of milk, 413.01 pounds of butter-fat, and 481.84 pounds of butter. Her average test was 3.94, and she was with calf during the last six months of her lactation.

Florence was purchased from Mr. William Ernst, of Tecumseh, Neb., on April 20, 1903, and, from that date to the present, her milk-and-butter records are as follows:

Year.	Milk.	Butter-fat.	Butter.
1903.....	7,537.5	358.51	418.26
1904.....	7,112.5	316.03	368.70
1905.....	10,487.0	413.01	481.84

Total, 3 years.....	25,137.0	1,087.55	1,268.80
Average, 3 years.....	8,379.0	362.51	422.93

She was born June 20, 1898, being now about 8 years old and in her prime. If she retains her normal condition, she will, no doubt, produce a still larger record next year. During the three years she has dropped three bull calves, and is due to freshen again in July of this year.

The last yearly record, in periods of four weeks, is as follows:

	Milk, lbs.	Butter-fat, lbs.	Butter, lbs.
April 9 to May 6.....	1,297.80	48.16	58.16
May 7 to June 3.....	1,451.80	48.29	58.29
June 4 to July 1.....	1,285.70	42.36	50.43
July 2 to July 29.....	1,970.20	37.69	45.83
July 30 to August 26.....	745.00	25.13	30.16
August 27 to Sept. 23.....	760.10	27.13	32.66
Sept. 24 to Oct. 21.....	628.00	23.93	28.71
Oct. 22 to Nov. 18.....	498.00	24.97	30.16
Nov. 19 to Dec. 16.....	533.80	24.01	28.71
Dec. 17 to Jan. 13, 06.....	539.10	25.18	30.16
Jan. 14 to Feb. 10.....	573.10	25.32	30.16
Feb. 11 to March 10.....	571.00	26.15	31.38
March 11 to April 7.....	542.20	28.23	33.87

Total.....10,487.00 413.01 481.84 pounds of butter.

THE PEERLESS WOVEN WIRE FENCE

has achieved such remarkable success in the U. S. that we have acquired the sole right for its sale in the Dominion. The farmers of the States are shrewd judges of farm equipment, and the enormous sales of Peerless Fence is one of the best proofs that it is a fence of unusual merit. But we don't expect to sell you Peerless Fence on the endorsement of American farmers. If we can get you to read how it is constructed, read what kind of material goes into it, see the fence itself, we know you will want none other. It is a practical fence—a durable fence—a common-sense fence. Simple in construction, needs no repairing, because it's made right.

ALL No 9 WIRE



Peerless Fence is made of big, heavy, Galvanized Hard Steel Wire of perfectly uniform size throughout, which, with the famous Peerless Lock, will turn any kind of stock and give long wear. Note the picture below—how securely, firmly it holds the upright and lateral wires—they can't be rooted up—nor shoved down—nor spread sideways—it's locked to stay locked. That means stability—long wear, almost everything desired in a fence. Suppose you send for our fence book and get all the good points about this really good fence. They mean money, time and pleasure to you. A postal card brings it.

The Banwell Hoxie Wire Fence Co., Ltd.,
DEPT. B Hamilton, Ont.



ROUTE BILLS

Route bills and folders printed with despatch. Up-to-date engravings of different breeds of horses on hand.

Mail Orders Solicited.
The London Printing & Litho. Co., Ltd., London, Ont.

23 Imported Clydesdale Stallions

for sale; also 6 Hackney Stallions. Inspection invited and prices right.

O. SORBY, GUELPH, ONTARIO.

FOR SALE: Clydesdale Stallion

"Gilt Edge" 4-97, bay, stripe, hind feet white; sire Prince of Strichen (imp.) dam Bella Honor of Wales by Hon. Lord (imp.) 2nd dan Princess of Collingwood by Prince of Wales (imp.) 3rd dan Lady Clyde of three years old, 16.1 hands, and weighs 1,600 lbs. One of the best specimens of his breed in the Dominion. Price, \$350. Half its value. CHATEAUVERT'S BREEDING FARM — QUEBEC.

Trumans' Pioneer Stud Farm

Bushnell, Illinois.

AMERICA'S GREATEST IMPORTING FIRM

Come and see the grandest lot of

Shire, Percheron & Hackney Stallions

Ever seen in Canada, and which, for the next thirty days, will be sold at very reasonable prices. Insurance against death from any cause, if you so desire.

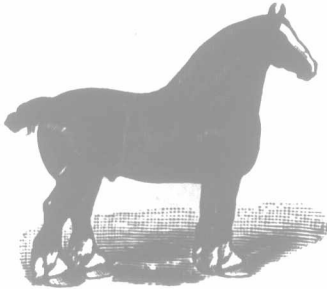
WE LEAD, OTHERS FOLLOW.

Don't buy a stallion until you see what we can do for you. Address:

H. W. TRUMAN, City Hotel, London, Ont.

SMITH & RICHARDSON

COLUMBUS, ONT.



Still have for sale a few good useful young CLYDESDALE

stallions and mares. Write us for prices and particulars.

P. O. address: Columbus, Ont.

Brooklin G.T.R., and Myrtle G.T.R. and C.P.R. stations.

GRAHAM BROS.

"Gairnbrogie," CLAREMONT,

IMPORTERS OF

HACKNEYS and CLYDESDALES



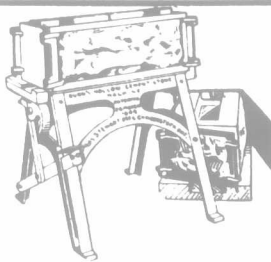
Established 30 years, and winners at all large shows in Canada and United States. Best of stock always on hand for sale. New importation of Royal winners just arrived.

HODGKINSON & TISDALE

Breeders of High-Class Clydesdales and Hackneys BEAVERTON, ONT.

Our present stock of mares and fillies are the best lot we ever had together. Among them are championship, first, second and third prize-winners at Toronto. Our prices are consistent with quality. We have something that will suit you.

BEAVERTON P. O. & STATION. Long Distance Telephone.



DUNN HOLLOW CONCRETE BLOCK MACHINES

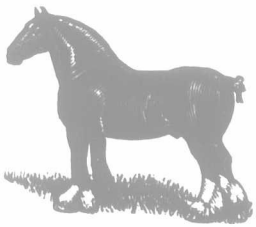
are in use from coast to coast, and every one giving the best of satisfaction. Concrete blocks make the handsomest, most durable and cheapest building material. They are simply and quickly made on the Dunn Machine; and the cost of outfit is very moderate. Full directions furnished.

Write for catalogue to Dept. O.



THE JAS. STEWART MFG. CO., LIMITED, Woodstock, Ont.

Clydesdales & Hackneys



Our new importation of Clydes (stallions and fillies) combine size and quality to a marked degree. Their breeding is unsurpassed. Their individuality cannot be duplicated on the continent. Come and see them. We sell cheaper than any other importer. Also, we have a few gilt-edged Hackneys on hand.

G. & J. HAY, Lachute, Que. A few miles from Ottawa.

Graham & Renfrew's CLYDESDALES and HACKNEYS



Our Clydes now on hand are all prizewinners, their breeding is gilt-edged. Our Hackneys, both stallions and mares, are an exceedingly high-class lot. We also have a few high steppers and carriage horses. Yonge Street cars pass the door every hour. Phone North 4483.

GRAHAM & RENFREW, BEDFORD PARK, ONT.

QUESTIONS AND ANSWERS. Veterinary.

ABSCESS-PARTIAL PARALYSIS.

1. Last September, my mare's coronet swelled and broke. I poulticed it, and it healed. I blistered the coronet three times, and the hoof has grown nicely. Now the trouble is starting again.

2. Two-year-old colt seems to be weak in his hind quarters; when he walks, he staggers. He has been this way since last fall.

Ans.—1. Apply hot poultices until it breaks again, then inject into the cavity, twice daily, a little peroxide of hydrogen until it heals.

2. This colt has disease of the spine, and it is doubtful whether he will make a thorough recovery. Keep him in a box stall. Purge with a pint of raw linseed oil, and follow up with 1 dram nuxvomica three times daily.

ECZEMA.

Have a mare, seven years old; an itch came on her; her body is covered with greasy pimples. She is fed on hay and oats, with a few potatoes every second day. She reared a foal last summer. She keeps thin.

Ans.—This is eczema. As no mention is made of her being in foal, we presume she is not pregnant. Clip the mare, and then give a purgative of 8 drams aloes and 2 drams ginger. Follow with 1 ounce Fowler's solution of arsenic three times daily every alternate week. Wash the surface of the body once weekly with strong warm soft-soap suds, applied with a scrubbing brush, and then rub until dry. Dress twice daily with corrosive sublimate, 20 grains to a quart of water. As soon as possible, let the mare eat a gradually-increasing amount of grass.

ITCHY LEGS, ETC.

1. Four-year-old Clydesdale filly has itchy legs. She rubs and bites them, and a yellowish oil exudes. Her legs swell considerably.

2. Is Epsom salts harmful to a pregnant mare?

3. Is there a mite that gets into the skin of horses' manes and tails?

Ans.—1. If this mare is not in foal, give her a purgative of 9 drams aloes and 2 drams ginger, follow up with 1 ounce Fowler's solution of arsenic twice daily every alternate week. Dress the legs twice daily with a solution of corrosive sublimate, 15 grains to a pint of water. This is a serious case, and will be very hard to treat, and I would advise you to employ your veterinarian to give it personal attention occasionally.

2. Not in small doses, but there are very few cases in which it will be beneficial.

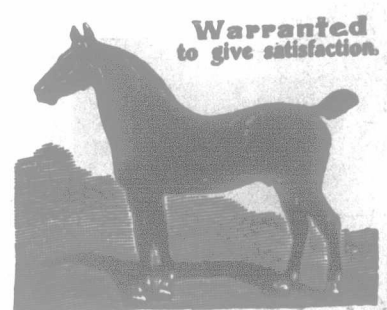
3. The parasite that causes mange may do so, but there is no insect that acts on these parts as many people think.

Miscellaneous.

MILKING BEFORE FIRST CALF.

I have a heifer about 22 months old, due to calve in July. Her udder has so developed that I think it should be milked out occasionally to avoid trouble. Will it do any harm to milk her, and how often should she be milked?

Ans.—A cow or heifer should not be milked before calving, unless the udder shows plain evidence of inflammation, in which case a light ration should be fed, and a purgative of Epsom salts (half a pound for a heifer, and a pound for a mature cow) given. Plenty of exercise should also be allowed, and the udder rubbed with a camphor-and-belladonna ointment (camphor, 4 ounces, and extract of belladonna, 3 ounces) to prevent its becoming congested. It should be remembered that the contents of the udder before calving are of entirely different character to that after the colostrum, or first milk, is removed. The former rarely causes pain, though the udder may be very large and caked. This condition gradually disappears after calving, leaving no permanent injury. To avoid milk fever, the udder should be only partially milked out the first three days after calving.



Warranted to give satisfaction.

GOMBAULT'S CAUSTIC BALSAM

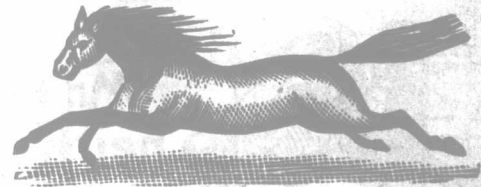
A safe, speedy and positive cure for

Curb, Splint, Sweeney, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

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This is the best market in Canada for either buyer or seller. Nearly two hundred horses sold each week.

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I have landed one of the best importations of

CLYDESDALES, SHIRES and HACKNEY STALLIONS.



males and fillies ever landed in America. They are got by such sires as Baron's Pride, Everlasting, Up-to-Time, Marcellus, Pride of Beacon and others. Scotland's greatest sires. Mares and fillies all bred in Scotland to the best sires obtainable. Have size and quantity, and I am offering these at just one half less than other importers are asking for theirs. For full particulars write

DUGALD ROSS, Streetsville, Ontario.

Clydesdales, etc.

To effect immediate sale I will offer some valuable stock at greatly reduced rates, far below their value. One 3-year-old Clyde stallion, good color; built like a draft horse, with the action of a Hackney, every joint working, at trot as well as walk; sire and dam imported. Yorkshire Sows now ready for service. Two Shorthorn bull calves; also yearling heifers.

RICHARD GIBSON, Delaware, Ont.

CLYDESDALES



Imp. Stallions and Fillies. The lot of such notables as Baron's Pride, Prince Alexander, Moncrieff's Marquis, The Dean, Montrave Mac and Battle Axe; they combine size and quality; their breeding is unsurpassed, and I will sell them cheap. GEO. G. STEWART, Hawick, Que. Long-distance Phone.

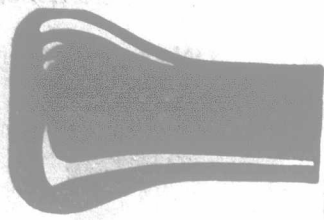
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No more blind horses—For Specific Ophthalmia, Moon Blindness and other sore eyes, BARRY CO., Iowa City, Iowa, have sure cure

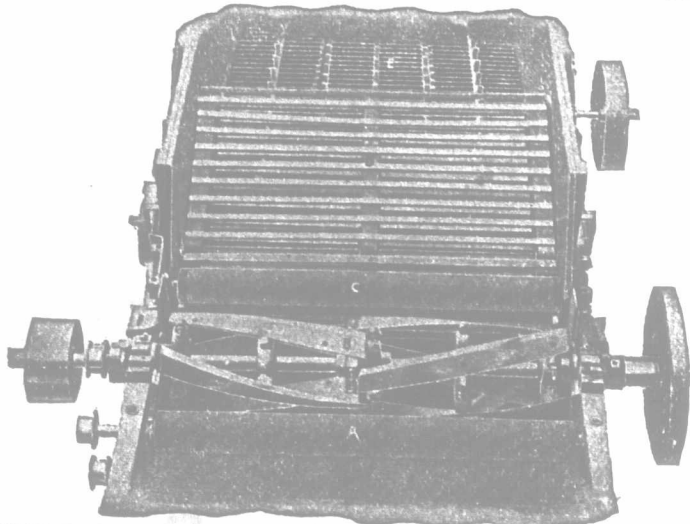


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if neglected may cause the loss of a valuable horse. Wire cuts, snag wounds, saddle and harness galls, sore shoulders, all demand prompt attention. One application of HORSE COMFORT is invaluable to the horse owner - it relieves and cures every kind of sore, it repels flies and brings comfort to the horse. Cures sore teats in cows. Most dealers sell it or we will send it direct. Write for FREE "Horse Comfort" book. If you have a cow ask for book, "The Cost of a Lost Cow." Dairy Association Co., Mrs., Lyndonville, Vt.

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Two Brilliant HACKNEY STALLIONS



Combining the best of breeding with perfect shape and action, arrived from England, April 20, at my stables. I also have the **SHIRE STALLION**, "Medbourne Heirloom," winner at the recent Toronto Show, and a 2-year-old typical young Shire stallion.

Stables at **H. George & Sons' Stock Farm, Crampton, Ont.**

R. KEEVIL, Prop., Crampton, Ont., 7 miles from Ingersoll, C.P.R., G.T.R., and two miles from Putnam, C.P.R.



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Shires, Clydes, Percherons, Hackneys and Spanish Jacks.

Have yet on hand two Percherons, two Clydesdales, one Shire and two 3-year-old Hackneys, which I will sell at a bargain before the season opens, to make room for my next shipment.

Stables at **Weston, Ont.** Telephone connection.

J. B. HOGATE, Proprietor.

Steel Roofing \$2.00 Per 100 Sq. Feet

Painted red both sides, most durable and economical roofing, siding or ceiling for barns, sheds, houses, stores, cribs, poultry houses, etc. Easier to lay and cheaper than any other material. No experience necessary to lay it. A hammer or hatchet are the only tools you need.

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This is our No. 15, semi-hardened, Flat Steel Roofing, 24x24 inches, per square of 100 square feet..... \$2.00
Corrugated "V" crimped or standing seam, per square..... \$2.10
For 25¢ per square more we furnish this material in 6 and 8 ft. lengths.

Brick siding and beaded ceiling or siding, per 100 square feet..... 2.60
Ask for Free Catalogue No. D645 - 500 pages of bargains - Roofing, Furniture, etc.
CHICAGO HOUSE WRECKING CO., 35th and Iron Streets. CHICAGO

QUESTIONS AND ANSWERS.
Miscellaneous.

CEMENT FENCE POSTS.

Where can I find out whether there is a patent on cement posts? I saw a cut of them in your paper some time ago.

Ans.—Write Hon. S. A. Fisher, Minister of Agriculture, Ottawa, who has charge of the patent branch.

GRASS IN GRAVEL DRIVEWAY.

Am troubled with grass growing on gravel driveway. What can I do to kill it?

Ans.—A solution of 1 part pure carbolic acid to 1,000 parts water, sprinkled on the walk, is said to be a good thing to prevent grass and weeds growing. Try it, and report results. Salt is a good destroyer of vegetation, and the liquid remaining after making hard soap is sometimes used to kill weeds in garden paths.

EXHIBITION BADGES.

I should like to know where badges, such as they give at exhibitions for prizes, can be obtained, and about what would they cost per hundred?

Ans.—Ordinary badges, cutting four to the yard, will cost about 4c. or 5c. each for the ribbon, and will be printed by job printers for about \$2 for the first hundred, and 50c. for each succeeding hundred. Apply to the London Printing & Lithographing Co., London, Ont., or the Bryant Press, Toronto, Ont.

SLIMY VINEGAR.

Our vinegar, made with maple syrup a year ago, still remains very slimy and thick, but it seems very good. We desire to know whether you can give us any information regarding the matter or not, if so, please let us know through your paper.

Ans.—Ropiness or sliminess may occur in milk, whey, beet juice, vinegar or other products, resulting from the growth of bacteria. Possibly you could overcome the slimy condition of the vinegar by heating with a little gelatin; or, if this should fail, heating with white of egg should clarify it.

MISREPRESENTATION OF COW.

A holds credit sale of farm stock. B buys a cow for \$42, for which he pays cash. The auctioneer was instructed to say that cow was due to calf on first of May. A also makes similar statement to B before a witness. Is B entitled to damages, and how should he proceed to collect same?

Ans.—It is not stated that the cow is not in calf, but we assume that such is the case, and we would say that B is entitled to damages, and can recover same by suit against A in the Division Court. B should, of course, endeavor to effect an amicable settlement of the matter with A, and only resort to litigation in the event of failure of the negotiations.

THE SHOOTING OF DOGS.

There is a farmer in our neighborhood who keeps a collie bitch. Some valuable dogs have been missing. His son, who is under age, is blamed for shooting all the dogs that come onto their place.

1. Is he justified in doing so, when the dogs are doing no harm?
2. If it can be proven that he shot those dogs, can he, or his father, be prosecuted for doing so, and to what extent?
AN INTERESTED FARMER,
Ontario.

Ans.—1. No.
2. The son would certainly be liable to prosecution, and to be subjected to a penalty which might be as much as \$100 over and above the amount of money done, or to three months imprisonment, with or without hard labor. The father would also be liable to a civil action for damages, and possibly to criminal proceedings also, if it could be shown that he instructed or authorized his son to commit the offence.

Bone Spavin

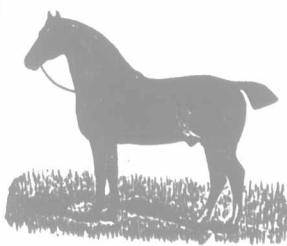
No matter how old the blemish, how lame the horse, or how many doctors have tried and failed, use

Fleming's Spavin and Ringbone Paste

Use it under our guarantee—your money refunded if it doesn't make the horse go sound. Most cases cured by a single 45-minute application—occasionally two required. Cures Bone Spavin, Ringbone and Sidebone, new and old cases alike. Write for detailed information and a free copy of

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Ninety-six pages, durably bound, indexed and illustrated. Covers over one hundred veterinary subjects. Read this book before you treat any kind of lameness in horses.
FLEMING BROS., Chemists,
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From such noted champions as Baron's Pride, Hiawatha, Macrogellus, Macrogellor, Baron's Fashion and Lord Lothian, etc. Inspection invited.

For fuller description and prices, write
T. H. HASSARD, Millbrook, Ont.

ABSORBINE

Removes the Inflammation and Swelling. Restores the Circulation in any Bruise or Thickened Tissue, without blistering, removing the hair or laying horse up. Pleasant to use, clean and odorless. \$2.00 per bottle delivered. Book 12-B free.

ABSORBINE, JR., for mankind, \$1.00 Bottle. Cures Bunions, Corns, Chilblains, Sprains, Etc., quickly. Genuine mfd. only by
W. F. Young, P.D.F., 73 Monmouth St., Springfield, Mass.
Canadian Agents, **Lyman, Sons & Co., Montreal.**

CLAYFIELD STOCK FARM

Now offers at reduced prices, for next 60 days,
CLYDESDALES

(8 head) mares and fillies; also one stallion, coming 2 years old. These are a first-class lot, some of which are winners at some of the best fairs in America. Also young **Shorthorn** cows and heifers, and two bulls, age 9 to 14 months.

J. C. ROSS, Prop., Jarvis, Ontario.

Imported Clydesdale Stallions and Fillies

Also Hackney Stallions for sale. At reasonable prices. Come and see them, or write to

Adam Dawson,

Cannington, Ontario.



DR. MCGAHEY'S HEAVE CURE for Broken-winded Horses. The only medicine in the world that will stop heaves in three days, but for a permanent cure it requires from one-half to one bottle used according to directions. Price, \$1.50 per bottle. The **Dr. McGahey Medicine Co.,** Kemptonville, Ontario.

For Sale: Imp. German Coach Stallion,

Kaiser Wilhelm, prizewinner and sure stock-getter; present weight, 1,460 lbs. For full description, etc., write
W. J. HARRIS, Schomberg, Ont.

ABERDEEN ANGUS CATTLE

For sale: a few good females of all ages, by imp. bull. Will sell right.
WALTER HALL, Washington, Ontario, Drumbo Station.

Aberdeen-Angus bull for sale, Black Diamond this spring. A good individual and extra stock-getter; has never been beaten in show-ring. Price reasonable. Also one Chester White boar, old enough for service.
A. G. SPAFFORD, Compton, Que.

Angus Cattle for Sale—Our present offering: Three young bulls and a cow, females of the best strains. Prices very reasonable.
J. W. BURT, Comingsby P.O.

QUESTIONS AND ANSWERS.
Veterinary.

PERIODIC OPHTHALMIA.

Three months ago my colt's eyes became sore, lids became swollen, and the eyes discharged water and some humor. They are now affected again in the same way.

J. M.

Ans.—This is a constitutional disease called "periodic ophthalmia." The attacks cannot be prevented, and all that can be done is to treat them when affected. It is very probable that after a few attacks, cataracts will form, which will cause blindness. When affected keep her in a partially-darkened stall. Bathe eyes well three times daily with warm water, and after bathing put a few drops of the following lotion into each: Sulphate of zinc, 15 grains; fluid extract of belladonna, 20 drops; distilled water, 2 ounces.

Theoretically speaking, the administration of 20 grains quinine, three times daily, should prevent the attacks, but it often fails.

V.

FOREIGN MATTER IN LUNGS.

Is it possible for a cow to draw a chaff, a piece of clover, or other foreign matter into the lungs during inhalation, and the particle remain there?

W. P.

Ans.—This is quite possible. The foreign matter is drawn down the wind-pipe during inhalation, enters one of the bronchial tubes, and sets up inflammation. I have, on several occasions, while holding a post-mortem, found such, especially timothy heads. This occurs both in cattle and sheep. During life, the condition can only be suspected, and nothing can be done. Doubtless, the accident occurs more frequently than we suspect, and in many cases the violent coughing that it produces succeeds in dislodging the irritant. It is quite possible for such an object to be present and not cause inconvenience. Local inflammation results, which may extend and cause death, or remain circumscribed. The parts become hardened, and inflammation subsides, in which case the irritating symptoms disappear.

V.

ONTARIO'S LARGEST AND FINEST HERD OF HEREFORDS.—We sell our beauties to breeders all over Canada, because we sell our stock at much below their value. Come with the rest and get some of the bargains in 25 bulls a year old and over, 25 heifers and 30 cows, or write to have us save you some. (Farm inside the corporation of the town.) A. S. HUNTER, Durham, Ont.

BROXWOOD HEREFORDS.

A few choice bull calves from my imported stock.

R. J. PENHALL, NOBER P. O., ONT.

FIVE NICE, SMOOTH HEREFORD BULLS FOR SALE.

Two about 16 months and three from 8 to 10 months old. Priced right to do business.

W. BENNETT,

Box 428, Chatham, Ont.

THE SUNNYSIDE HEREFORDS



Twelve high-class bull calves and 4 yearling and 2-year-old bull, we will place at a price that will move them quick. Some choice cows and heifers are yet left for sale. Address: A. F. O'NEIL, Maple Grove P. O. or M. H. O'NEIL, Southgate P. O. Iderton Sta., L. H. & B.; Lucan Sta., G. T.

FOREST VIEW FARM HEREFORDS

Four 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.

HEREFORDS—We are now offering a few thick, smooth young bulls and a number of females—a low-down, even, beefy lot. If in want of something extra good, correspond with us. We can please you. J. A. LOVERING, Coldwater P. O. and Sta.

DURHAM CATTLE FOR SALE

I have for sale two young bulls, 8 months old, sired by Imp. Rustic Chief = 40419 = (70877); also a few females, among them a young cow fit for any show-ring.

HUGH THOMSON,

Box 556, St. Mary's, Ont.

When Writing Please Mention this Paper

DISLOCATION OF THE PATELLA, ETC.

1. Yearling colt frequently takes a stiffness in one hind leg. He holds the foot on the ground, and does not want to move it. When forced to move, he brings it up with a snap, and is then all right for a while.

2. Where, and at what price, can I procure an instrument for ringing bulls?

H. H.

Ans.—1. This is dislocation of the patella (commonly called stifed). Keep the colt in a box stall. Clip the hair off the front and inside of stifle joint. Get a blister, composed of 1½ drams each biniodide of mercury and cantharides, mixed with two ounces vaseline. Rub well into the parts; tie so that he cannot bite or lick the joint. In 24 hours tub well again, and in 24 hours longer wash off and apply sweet oil. Let him loose now, and oil every day. As soon as the scale comes off, blister again, and, after that, once every month for 4 or 5 times. It will be better to keep him in the stall for at least 2 or 3 months. It will make a serviceable horse, but it is quite possible he will have a puffy enlargement below the joint.

2. Instruments of this nature can be purchased from dealers in veterinary instruments. I do not know the price, but expect it will be from \$1 to \$1.50. Considerable discussion re ringing bulls has taken place in recent issues of this journal.

V.

WILLING TO RETIRE.

A certain prosy preacher recently gave an endless discourse on the prophets. First he dwelt at length on the minor prophets. At last he finished them, and the congregation gave a sigh of relief. He took a long breath, and continued: "Now I shall proceed to the major prophets." After the major prophets had received more than ample attention, the congregation gave another sigh of relief. "Now that I have finished with the minor prophets and the major prophets, what about Jeremiah? Where is Jeremiah's place?" At this point a tall man arose in the back of the church. "Jeremiah can have my place," he said. "I'm going home."

MAPLE GROVE SHORTHORNS

Imp. and Canadian-bred.

Males and females, as good types as the breed produces. With breeding unsurpassed.

C. D. Wager,

Enterprise Stn. & P. O., Addington Co.

Wm. Grainger & Son



Hawthorn herd of deep-milking Shorthorns. Aberdeen Hero (imp.) at head of herd. Eight grand young bulls by Prince Misty—37864—. Prices reasonable.

Londesboro Station and P. O.

Maple Lodge Stock Farm

I am offering an excellent dark roan imported bull, nearly three years old, for sale. Also one yearling bull, and a few choice heifers of milking strains.

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

HIGH-CLASS SHORTHORNS.

The well-known Duthie-bred bull, Scottish Beau, imp. (86099); formerly at head of B. A. & J. A. Watt's herd, now heads my herd. Present offering: A few females of different ages. Also for sale, Clydesdale mare and yearling stallion colt; also choice Sarrad Plymouth Rock eggs for setting, \$1 per 15.

N. S. ROBERTSON, Amprior, Ont.

Oak Grove Shorthorns—Present offering: Several imp. cows, heifers and young bulls, all sired by Imp. Nonpareil Duke and out of imp. dams; also the stock bull, Imp. Nonpareil Duke, a choice offering. Prices right. W. J. ISAAC, Cobourg Station, Harwood P. O.

EASY MONEY AT HOME

Raising canaries. More profitable than chickens. All indoors. You'll get \$2.50 to \$5.00 each for young singers. Experience unnecessary. To get you interested quickly, we send COTTAM BIRD BOOK (thousands sold at 25c.) and two copies BIRD BREAD 10 CENTS. and "CANARY VS. CHICKENS," showing how to make money with canaries, all for 50c. stamps or coin. Address COTTAM BIRD SEED, 38 St., London, Ont.

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SECURE ONE OF OUR KNIVES AND BE HAPPY.



Satisfied.

"The knife came all right, and is a good one."
Perth Co. Ernest Mailin.

"I received your knife on the 5th, and I think it is a beauty. I think you deserve credit for sending it so promptly."
Halton Co. Ernest Wilson.

THE FAMOUS RODGERS MAKE

A Beautiful Knife, with nickel handle, finest steel blades, strong and durable. Should last a lifetime.

REGULAR PRICE, \$1.00.

If you want it, send us **ONE** new subscriber (not your own name) at \$1.50 per year and it is yours.

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FILL OUT THE FOLLOWING BLANKS, AND RETURN TO US WITH \$1.50.

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PLEASE SEND ME THE PREMIUM KNIFE.

THE WILLIAM WELD CO., LTD., London, Ontario, Canada.

SASKATCHEWAN LANDS.

Do you want a FARM? If so, I have a MESSAGE FOR YOU!

15,000 acres of land for sale on the crop payment plan. Beautiful undulating prairie. Soil that yields a crop of WHEAT averaging THIRTY bushels per acre. Abundance of good water. Within one to eight miles from good towns, on the Pheasant Hills branch of the C. P. R., also near route of the Grand Trunk Pacific branch, now being built between Portage la Prairie and Edmonton. Within the next five years this land will be worth from \$20 to \$25 per acre.

Do you think you can afford to lose this chance of procuring a first-class farm on such easy terms?

I agree to furnish you with a farm at \$12 per acre, and you pay for it by delivering half the crop grown each year.

WRITE for my lists, also ask for LIST of lands for sale on EASY cash terms. No opportunity like the present for buying FARMS. WRITE me to-day, and I will give you full particulars. Address

A. B. COOK, Regina, Sask., Canada.

Galt Steel Siding

This is the Sheet Metal Age.



Some metal sidings are very crude imitations of brick and stone, made from the cheapest grade of sheet iron poorly painted.

Galt Art Metal Sidings are made from best galvanized sheets, or specially treated cold rolled steel, heavily painted with elastic oxide, which is not affected by extremes of temperature.

Cheaper and warmer than wood.

Handsome as stone or brick.

Fire and wind proof.

Reduces insurance and coal bill.

Worth knowing more about.

Write for Catalogue and Classic Kids Booklet.

GALT ART METAL CO., Ltd.
GALT, ONT.

It's in the Clamp

The lasting strength of a wire fence rests mainly in the clamp that secures the crossing wires.

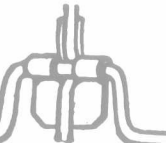
The famous Anchor clamp has a grip that never fails. Bending the wires slightly, it keeps them fastened in the one place steadily, in spite of storm and pushing animals. It cannot slip. Nor can the wires spread.

Made from one-inch steel—japanned or galvanized, the latter being proof against rust.

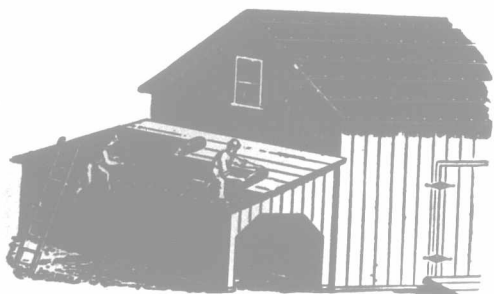
Anyone can put up an Anchor fence. But our agent will do it, if you like. There's no fencing so thoroughly satisfactory. Simple, reliable and wonderfully low-priced.

Write for free catalogue, showing pretty ornamental styles, also farm and garden gates.

Good, live agents wanted.



Anchor Fence Co.
STRATFORD, Ont.



Mica Roofing

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

Hamilton Mica Roofing Co., 101 Rebecca St. HAMILTON, CANADA

QUESTIONS AND ANSWERS. Veterinary.

CATARRH—INDIGESTION.

1. Cow in good health refused to eat. Her eyes became swollen, and discharged water, and her nostrils discharged matter. She died in about a week.

2. Sheep eats very little, grinds her teeth, and froths at the mouth. G. D.

Ans.—1. The symptoms indicate that the cow died of malignant catarrh, which generally proves fatal, notwithstanding treatment.

2. She has indigestion. Give her 8 ounces raw linseed oil, and follow up with 30 grains each sulphate of iron, gentian, and nux vomica three times daily. Feed anything she will eat, and if she refuses everything, give her a quart of boiled flaxseed as a drench five or six times daily. V.

OFF HIND LEG SWELLS.

When my eight-year-old horse stands in the stable, his off hind leg swells from the hock down. If driven eight or ten miles, the swelling mostly all disappears. The man from whom I bought him says the trouble was caused by him getting calked, and getting cold in it. He has been this way for a year. T. R.

Ans.—It is quite possible the man from whom you bought him told the truth. We frequently notice a persistent stalking follow calks and other wounds on the limbs, and the tendency is very hard to remove. If possible, see that he gets regular exercise. Hand rub the leg after driving, and apply a bandage from the fetlock to the hock, and leave it on all night. When you remove the bandage in the morning, hand rub well again. Give him 1 dram iodide of potassium twice daily in damp food. If appetite fails, or tears run from his eyes, or saliva from his mouth, either reduce the dose or cease giving the potash for a week, but it is probable he will stand dram doses. V.

BLACKLEG.

1. What can one do for animals affected by blackleg?

2. Is it contagious?

3. Would there be danger of exposing a bull, by taking to him cows from herd where a number of animals have died from blackleg?

4. Can one do anything as a preventive where cattle are exposed, or in a neighborhood where it is prevalent? Is vaccination any good? INQUIRER.

Ans.—1. Nothing can be done to cure blackleg.

2. It is caused by a micro-organism, which resides in the soil and invades the system through the medium of food, and through wounds of the skin and mucous membrane.

3. We should judge this breeding would not be unattended with risk. While infected animals quickly show symptoms, and for this reason there would be little danger of unwittingly breeding the bull to an infected cow, still the germs would be present about the stable, in the dust, litter, and, possibly, on the skins of the animals, and thus the infection might be carried by the cows brought to the bull.

4. Vaccination is a reliable preventive of blackleg.

LAME IN SHOULDER.

1. Mare has been lame in shoulder for three weeks. She rests the leg, and refuses to lie down, and she suffers great pain. My veterinarian says it is inflammation of the shoulder joint, and he can do little for her.

2. What is the best treatment for ringbone? J. M.

Ans.—1. Apply hot water or cloths wrung out of hot water to the joint. The more constantly heat is kept to parts the better. Rub well several times daily with a liniment composed of the use of opium, 4 ounces; chloroform, 2 ounces; acetate of lead, 2 ounces; water, 1 quart. As soon as the acute inflammation is allayed, apply a blister of 15 grams each biniodide of mercury and cantharides, mixed with 2 ounces vaseline. Clip the hair off, be so that she cannot bite the parts; rub well with the blister daily for two days, on the third day wash off; let the head down, and apply sweet oil to the parts daily. Repeat the blistering in a month, if necessary.

2. Firing and blistering. This can be properly done only by a veterinarian. V.

Out of Condition.

After months of dry feed, there is a clogging of the animal's system. The stomach rebels because of the absence of all aroma. This rebellion and clogging places the system in such condition as to be an easy mark for parasites. Ringworm, mange, swelled leg, scratches are all troubles arising from bad blood. Bad blood is the result of imperfect digestion of food, and food that lacks aroma cannot be perfectly digested.

An even tablespoonful of Herbageum, fed twice daily with the ordinary food, will supply the necessary aroma to ensure thorough assimilation. This means pure blood and freedom from disease and parasites, as well as a rapid growth, or an economical increase in animal products. These statements have been tried, tested and proven true. We submit the following letters as proof:

"I have used Herbageum during fourteen years, and would not be without it. I worked with dairy cattle, and found it the best thing I have used. I have used no other condition powder during the last thirteen years. I feed to my horses when I work them.

Oxdrift, Ont. W. J. ROBINSON."

"I cannot praise Herbageum too highly. I had a horse in such poor condition that there was no hope of recovery. I tried Herbageum, and it brought him around all right. I feed it to horses, cattle, pigs and hens; results are always the very best. Herbageum is of real benefit, and I cannot say too much in its favor. JAMES DOIDGE.
New Liskeard, Ont."

Clover Lea Stock Farm SHORTHORNS

For Sale: One dark roan bull, got by Nonpareil Archer (imp.), out of a Duchess cow; also one show heifer. Prices reasonable.

R. H. REID,
Pine River, Ont. Ripley Sta., G. T. R.

Hillhurst Shorthorns

Registered bull calves for sale, by Broad Scotch =46315=, from imported English and home-bred dams of good milking strains.

JAS. A. COCHRANE, Compton, P. O.

Shorthorns and Berkshires

For Sale: The two-year-old show bull, Proud Archer =49612=, from an imported sire and dam of good milking strain, and ten fine young Berkshire sows, bred to our imported boar.

S. J. PEARSON, SON & CO.
Meadowdale, Ontario
Stations: Streetsville and Meadowdale, C.P.R.

GEORGE D. FLETCHER, Breeder of Scotch Shorthorn Cattle and Large English Yorkshire Swine. Herd headed by the Duthie-bred bull (imp.) of Morning, winner of first prize at Dominion Exhibition, Toronto, 1908.

Present offering: young Shorthorns of either sex; also a choice lot of Yorkshires of either sex, six months old, from imp. sire and dam. Prices easy.
Sinkham P. O., Ont. Erie Station and Tel.

SHORTHORN BULLS

FOR SALE

1 roan calf, 15 months old, of the Duchess of Gloster family.

1 roan, two years old, from imp. sire and dam. Also a number of good registered Clyde mares.

JOHN MILLER, Brougham, Ont.

Shorthorn Cattle and Lincoln Sheep

Shorthorn bulls, cows and heifers for sale at greatly reduced prices for the next 60 days. om

J. T. GIBSON, Denfield, Ont.

CEDARDALE SHORTHORNS



For immediate sale: Four young bulls and a few heifers, a nice thick, well-put-up lot, and bred on heavy-milking lines. Will be sold cheap.

DR. T. S. SPROULE, M.P.
Markdale, Ont.

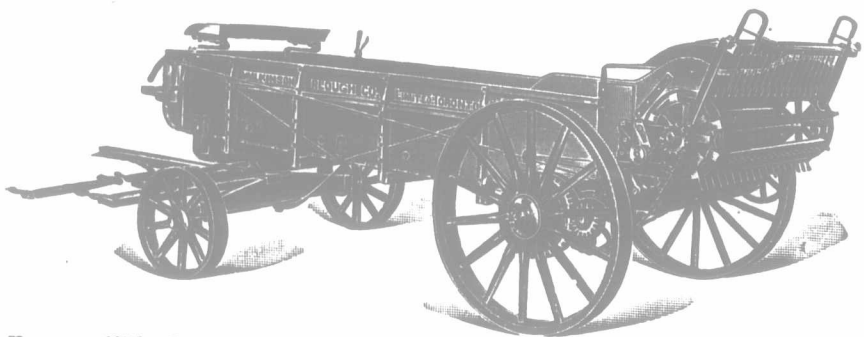
Riverview Shorthorns and Oxfords

Shorthorns represent Crimson Flowers, Athelstanes, Lady Janes and Roses.

We have for sale three yearling bulls and some spring calves, also a few females. A thick, straight, mossy lot. Also some Oxford Down ram lambs.

Peter Cochran, Almonte P. O. and Station.

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Have you 125 loads of manure, or more, to spread? Are you going to plant 25 or more acres of oats? If so, let us know, and we will show you how you can own a manure spreader absolutely FREE. Write just these words on a postal card or in a letter: I have _____ loads of manure _____ horses; _____ cows, and _____ small stock. Write to-day.
THE WILKINSON PLOUGH COMPANY, LTD., TORONTO, CAN.

FOUR CENTS MORE FOR NO. 1 CREAM THAN FOR NO. 2

The creameries of the country have become so convinced of the increased value of thick cream over thin cream that many of them are paying a premium on cream containing 30 per cent or more butter fat over that containing under 30 per cent.

One of the largest buyers of cream in the West, the Hanford Produce Co., of Sioux City, Iowa, issued in January the following statement to its cream shippers. "We are going to offer a premium of 4 cents per pound butterfat for what we term No. 1 cream.

FIRST GRADE cream shall consist of all hand separator cream which is delivered at least twice a week in winter and three times per week in summer, this cream to be delivered reasonably sweet and testing 30 per cent or more.

SECOND GRADE cream shall consist of all hand separator cream delivered in good condition not less than once a week or testing less than 30 per cent."

Under these conditions creamery patrons should buy only the cream separator that can skim a heavy cream. The

UNITED STATES CREAM SEPARATOR

can skim a heavier cream than any other and do it without clogging. The U. S. has the record of skimming a cream testing 65 per cent. And remember also that the U. S. holds the **World's Record** for clean skimming.

It gets the most cream and will deliver as heavy a cream as you want. Write for copy of our fine, new, 1906 separator catalogue. It tells why the U. S. can skim the **first grade** cream; how it made the **World's Record** for clean skimming and many other things you should know before you put any money into a cream separator. Write for a copy today—do it now while you think of it. Ask for catalogue No. 400 and we'll send it quick.

VERMONT FARM MACHINE CO.,
Bellows Falls, Vt.

We probably have a selling agent in your vicinity, and if so, will give you his name when we send you the catalogue. It is his business to show you a U. S. Separator if you want to see one.
 437

PURE SCOTCH SHORTHORNS SHORTHORNS

Herd bulls: Imp. Prime Favorite =45214-, a Marr Princess Royal.

Imp. Scottish Pride =36106-, a Marr Roan Lady.

Present offering:
 2 imported bulls.
 15 young bulls.
 10 imported cows with heifer calves at foot and bred again.
 20 one- and two-year-old heifers.

Visitors welcome. New catalogue just issued.

W. G. PETTIT & SONS, Freeman, Ont.
 Burlington Jct. Sta. Long-distance telephone in residence.

SHORTHORNS

The champion herd of Canada, 1905, is headed by the great show and breeding bulls Mildred's Royal and Springhurst. Cattle of all ages for sale, whether for the breeding herd or the showing.

R. A. & J. A. WATT,
 Salem Post and Telegraph Office, Elora Stn.
 13 miles north of Guelph, on the G. T. R. & C.P.R.

SCOTCH-TOPPED SHORTHORNS.

Three young bulls, from nine to thirteen months old; also several young heifers by Scottish Baron (Imp.) for sale. Prices reasonable.

H. GOLDING & SONS, Thamesford, Ont.
 Stations, Thamesford, C.P.R.; Ingersoll, G.T.R.

Sunnyside Stock Farm

—8 superior young Shorthorn bulls for sale. All from imp. bulls, four from imp. cows. Good enough to place at head of any herd. Apply
JAMES GIBB, Brookside P.O. and Telephone.

SHORTHORNS

One imported aged bull, grandly bred and a great sire.
 One imported bull, three years old, a show bull and good sire.
 Four good big young bulls, from imported sires and dams, the kind we all want.
 Three young bulls, with size and substance to get great feeders. Price very low.
 Three imported cows, with calf or calf at foot, sold on an easy way to buy.

Ask for catalogue of **Straight Scotch Shorthorns**, with lowest prices.
 Will import **Show and Breeding Sheep** of all the mutton breeds, and am taking orders now.

ROBERT MILLER,
 Stouffville, Ontario.
 Telephone, Telegraph, Post Office & Railway Sta.

T. DOUGLAS & SONS,

Strathroy, Ont.

SHORTHORNS and GLYDESDALES

Present offerings: 13 young bulls, of No. 1 quality, ready for immediate service; also cows and heifers of all ages. Also one imp. stallion and two brood mares. Prices reasonable. Visitors welcome. Farm one mile from town.

A. EDWARD MEYER,
 Box 378, Guelph, Ont.
 Scotch Shorthorns.

The Sunny Slope herd comprises Cruickshank Bellonas, Mystes, Villages, Brawith Buds, Broad-hooks, Bruce Augustas, Mayflowers, Campbell Bessies, Urys, Minas, Clarets, Kilblean Beautys. Herd bulls: Scottish Hero (imp.) (90065), a Sheth-in Rosemary, and Chief Ramsden =62548-, a Miss Ramsden. Correspondence solicited. Visitors welcome. Long-distance phone in house.

QUESTIONS AND ANSWERS.
 Miscellaneous.

TO SELECT FERTILE EGGS — HATCHING CHICKEN WITH DUCK EGGS.

1. Having read the incubator rules, in the April 12th number of "The Farmer's Advocate," can you tell me how you know the fertile eggs? You say to set only fertile eggs. Please tell me the object of balancing the eggs, large end up, a few hours before placing on tray?

2. Have a 50-egg incubator. Last week put 35 duck eggs in; this week I intend filling the tray with hens' eggs. Do you think this a good plan? W. F.

Ans.—1. The rules referred to were quoted from an authentic American bulletin. It is impossible to determine whether an egg is fertile or not until 28 to 30 hours after incubation begins. In practice, the first testing is done about the seventh day, and all non-fertile eggs removed. The maxim would have been clearer had it read, "Set only those eggs which you have good reason to believe are fertile." Fertile eggs may be expected from breeding stock that is healthy and properly fed, mated, watered and exercised. Eggs must be promptly gathered and carefully looked after, and held at a temperature of about 60°, although they will stand a variation from 40° to 100° F. They should not be allowed to dry out, nor exposed to a current of cold air, steam or vapor. During storage they should be partly turned every day. The balancing of the eggs, large end up, a few hours before placing in the tray, is advised as a means of balancing the yolk in the center and locating the air cell.

On this point, W. R. Graham, of the Ontario Agricultural College, says:

"I can see no particular object in balancing the eggs with the large end up a few hours before they are placed in the incubator, with the exception that probably it might help the egg contents to become normal in position. This would only apply when the eggs have been roughly treated before they had come into the hands of the incubator operator. There is no positive, proof, so far as I know, that would show that the eggs hatch better when they have been allowed to stand in this manner than when they are taken out of the baskets and put in the machines. Sometimes an operator will try one or two experiments of this kind, and will get results which appear to indicate strongly one way or the other. Personally, I have found that in testing many of these points, when we take the eggs that are laid by the same individual hens, there are a great many things similar to what you mention that might appear in an ordinary lot of eggs, to be correct, but when you take the eggs from the individual hens and submit half to treatment as recommended and the other half set as they are going, as far as I have been able to learn, there is very little difference."

2. The weight of opinion is against incubating duck and hen eggs together, but in this case it might be attempted, we think, without much danger of decreasing the chances of success with the duck eggs. On this point, also, we quote Prof. Graham:

"The eggs that are going to be put in with the warm duck eggs would need to be warmed to about 90 degrees before being placed in the incubator, otherwise you run a chance of chilling the duck eggs. This might be accomplished by putting the hen eggs on the bottom of the machine or in the nursery of the machine for six or seven hours before putting them on the egg-tray. If no moisture is going to be used, you would likely get a fair hatch from the eggs by so mixing them, but if the duck eggs are being damped each day, or a wet cloth placed over the top of them each day, I am not sure but what you would get rather poor results from the hen eggs. Personally, I have never had great success in mixing the two kinds of eggs, although I have a number of correspondents who are more or less successful. If your correspondent wishes to try it, there is no serious loss likely to occur, except that he may get a poor hatch of chickens. Duck eggs are rather difficult to hatch in incubators satisfactorily, and the method that is successful in one locality does not seem

(Continued on next page.)

USED UP AND TIRED OUT MEN AT THE OFFICE WOMEN IN THE HOME CHILDREN AT SCHOOL

Every day in the week and every week in the year men, women and children feel all used up and tired out.

The strain of business, the cares of home and social life and the task of study cause terrible suffering from heart and nerve troubles. The efforts put forth to keep up to the modern "high pressure" mode of life in this age soon wears out the strongest system, shatters the nerves and weakens the heart. Thousands find life a burden and others an early grave. The strain on the system causes nervousness, palpitation of the heart, nervous prostration, sleeplessness, faint and dizzy spells, skip beats, weak and irregular pulse, smothering and sinking spells, etc. The blood becomes weak and watery and eventually causes decline.

Milburn's Heart and Nerve Pills

are indicated for all diseases arising from a weak and debilitated condition of the heart or of the nerve centres. Mrs. Thos. Hall, Keldon, Ont., writes: "For the past two or three years I have been troubled with nervousness and heart failure, and the doctors failed to give me any relief. I decided at last to give Milburn's Heart and Nerve Pills a trial, and I would not now be without them if they cost twice as much. I have recommended them to my neighbors and friends."

Milburn's Heart and Nerve Pills 50 cts. per box or 3 for \$1.25, all dealers, or The T. Milburn Co., Limited, Toronto, Ont.



ARTHUR JOHNSTON
 Greenwood, Ont.

Offers for sale, at moderate prices,

12 high-class yearling BULLS

All sired by imported bulls, and most of them from imported dams.

Also imported and home-bred cows and heifers of all ages.

GREENGILL HERD
 of high-class

SHORTHORNS

We offer ten young bulls ready for service, a number of them from imported sire and dam; also high-class females, all ages, either imported or Canadian-bred. The herd is headed by (Imp.) Lord Reesberry.

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

CALF-SKINS
 HIDES, WOOL, ETC.

Consignments solicited. Write and get our prices.

E. T. CARTER & CO., TORONTO.

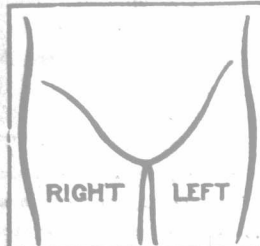
For Sale: Two Young Shorthorn Bulls

Also Cows and Heifers, and one good Imp. York. Sow, also a good Yorkshire Bear one year old. Good breeding and good animals.

DAVID MILNE, ETHEL, ONT.

THE NEW QUICK WAY TO CURE RUPTURE

Is Without Operation, No Pain, No Danger, No Loss of time From Daily Work.



This Remarkable Simple **NEW WAY TO CURE RUPTURE** has opened up a new era in the treating of this terrible dangerous, dreaded, hitherto considered incurable malady, Rupture. You ruptured people who have borne the painful agonies of Rupture surely will be glad to see this notice, for it means a **NEW** lease of life for you—one free from pain and suffering. Won't it be grand to be cured? You can be sure—hundreds of Canadians have been. Cut out this notice. Mark on the diagram position of Rupture. Answer questions and send all to me at once. I will send you **Free A FREE TEST** to show you how quickly you can be cured right in your own home. I'll also send you a valuable Book of Information for the Ruptured. You must write for these at once. Remember they are **FREE**. No ruptured person who has had these would part with them for money. You wouldn't either. Write at once.

DR. W. S. RICE, 2 1/2 East Queen St., Block 279 Toronto, Ont.

Do you wear a truss?.....	Does rupture pain?.....
On which side ruptured?.....	Ever operated on for rupture?.....
Age.....	Time ruptured.....
Name.....	Address.....

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of 38 head of Scotch and Scotch-topped
SHORTHORNS
IMPORTED AND CANADIAN-BRED

Celias, Fairy Maids, Clarissas, Margarets, Roses of Kentucky, Rose of Saxons and Zees, 26 females and 10 bulls, including the stock bulls, Imp. Prince Cruickshank and Imp. Cronje 2nd, all in the pink of condition and a high-class lot, on

WEDNESDAY, MAY 16th, 1906

at Lot 11, Con. 2, W. Chinguscouay, Co. of Peel, 3 1/2 miles from Brampton, where conveyances will meet morning trains on C.P.R. and G.T.R. Terms: Six months, or 5 per cent. per annum off for cash. For catalogues and other information, address

GUY BELL, Brampton, Ont.

SCOTCH SHORTHORNS

9 heifers, yearlings.	4 bulls, yearlings.
29 heifers, calves.	27 bulls, calves.

All out of imported sires and dams. Prices easy. Catalogue.

JOHN CLANCY, H. CARGILL & SON,
Manager. Cargill, Ont.

MAPLE SHADE SHORTHORNS
Cruickshank
and SHROPSHIRE SHEEP

We have now for sale one (imp.) bull, 15 months; also a good roan junior yearling show bull. Catalogue on application.

JOHN DRYDEN & SON, Brooklin, Ont.
Stations Brooklin, G.T.R. Myrtle, C.P.R. Long-distance telephone.

SHORTHORNS AND LINCOLNS.

Present offerings: 4 choice young bulls 9 to 14 months; also a few good heifers, Lincolns, descended from the best English flocks.

JOHN LEE & SONS,
Highgate, Ont.
40 miles west St. Thomas, on
M.C.R.R. & P.M. Ry.

KENWOOD STOCK FARM. SHORTHORNS.

Headed by (Imp.) Jilt Victor—45187—10 grand young bulls; also heifers; from imp. and home-bred cows, for sale. Choice Lincoln sheep; Berkshire and Tamworth hogs offered.

HAINING BROS., Highgate, Ont. Kent Co.

Shorthorns—Two choice young bulls from British Flag, imported. Write

C. & J. CARRUTHERS, Cobourg, Ont.

For Shorthorns—One young bull, 14 months old; cows and heifers, all ages. Shropshires, all ages and both sexes.

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

Shorthorns, Leicesters and Berkshires—1 yearling bull, bull calves, heifers, all ages, for sale; also young Berkshires and Leicesters. For particulars address

E. JEFFES & SON, Bond Head P.O., Bradford and Beeton Stns., G.T.R.

Shorthorns Bargains on Quick Sales.—One 10 mos bull; weight, 900 lbs.; by imp. bull and great milking dam. Choice quality. Also cows and heifers. Write and get prices, etc. **A. M. SHAVER, Ancaster, Ont. Hamilton, G. T. R.; Mineral Springs, T. H. & B.**

Shorthorns—Heifer calves from four to eight months old. Also a few young cows in calf.

Wm. E. Harmiston, Brickley P.O., Ont. Hastings Station.

SCOTCH-TOPPED SHORTHORNS

Five choice young bulls, 8 to 12 months; also four heifers. **W. H. WALLACE, Woodland Farm, Mt. Forest, Ont.**

SHORTHORNS AND DORSETS.

3 bulls, seven to nine months old; also a few ewe lambs and ewes in lamb for sale. Prices reasonable.

R. H. HARDING, Mapleview Farm, Thorndale, Ont.

FOR SALE—A few young bulls from a few days to six months old; cows and heifers all ages; one bull (calved in May) with Imp. British Statesman and Imp. Diamond Jubilee on top of pedigree; also **Loyal Duke—55026—(Imp.)**

FITZGERALD BROS., Mount St. Louis, ELMVALE STATION, G. T. R.

LAKEVIEW SHORTHORNS.

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

THOS. ALLIN & BROS., Oshawa, Ont.

High-class Shorthorns—We are now offering 5 young bulls and 3 heifers, two, three and four years of age. Marigolds, the eldest, a daughter of Imp. Royal Member, has a calf at foot by Sailor Champion. This is an extra good lot.

THOS. REDMOND, Millbrook P.O. and Stn.

PROSPECT STOCK FARM. For sale: 4 **Shorthorn** Bulls, including Gold Mine (imp. in dam), also some choice young females. Stations: Cookeville and Streetsville, C.P.R.; Brampton, G.T.R. Peel Co. **F. A. Gardner, Britannia, Ont. o**

QUESTIONS AND ANSWERS. Miscellaneous.

(Continued from page 753.)

to be so successful in another, at least, that has been my experience.

At present, we are operating our duck machines at the ordinary temperature of 102 1/2 degrees, but are applying cloths that are dipped in warm water of a temperature of about 110 degrees, and then the water wrung out of the cloth. This cloth is then applied to the top of the tray of eggs; that is to say, the eggs are taken out of the machine and placed on the turning table, then the warm cloth is put over the top of the eggs. The wet cloth is allowed to stay for a minute or two (the cloth cools quickly). The eggs are then turned, and the cloth is applied again, after which the eggs are put back in the incubator.

If you do not wish to do this, you can take a brush, wet it, and wipe the eggs over, only be careful not to leave drops of water clinging to the shell. Even after going to all this trouble, occasionally the ducks do not hatch. I might mention in addition that duck eggs require more air in the incubator than is required by hen eggs.

We should be pleased to hear from any reader who has had experience, favorable or unfavorable, in hatching in the same machine eggs from different kinds of fowls.

IMPURITIES IN SAMPLE OF SEED.

Find enclosed two samples of seed. Give name of seed in smallest package; also name of any other noxious seed found in package B. A. E.

Ans.—Package A contains seed of lady's-thumb. Sample B contains seed of alsike clover, together with seed of lady's-thumb, lamb's-quarter, green foxtail, stickseed, Mayweed and smartweed. All these (except, of course, the clover) are weeds of a more or less noxious nature.

WORMS FOR IDENTIFICATION—OYSTER-SHELL BARK-LOUSE.

While scraping my trees, I came across several black worms about 1/4 inch long, also one green worm about the same length, which seemed to affect the Spy trees especially. I am enclosing the green worm, and thought, perhaps, these were borers. I would like to see in the valuable columns of your paper a remedy for these, as I have a very large orchard, which has been seeded down two or three years. Also, I found a great many bark lice, and would like to know if scraping is beneficial. What would be the best wash for these? J. T.

Ans.—The green worms enclosed appear to belong to the Hymenoptera order, although we cannot be very sure, as they were crushed in transmission through the mail. Evidently the larvae were taking shelter under the bark of the trees for the winter, but we do not think they can be doing the trees any harm. For information concerning oyster-shell bark-louse, see "The Farmer's Advocate," of March 29th, page 536. If the scales are found principally on the larger limbs, scraping will be a practicable remedy.

RABBITS AND PIGEONS.

1. Would it pay for a farmer's son to raise rabbits?
2. If so, where should rabbits be kept, and what should they be fed?
3. Would it pay to raise pigeons?
4. If so, what should pigeons be fed, and where should they be kept?


OSWALD LECUYER.

Ans.—1. No; raise poultry instead. If you want a pet, keep a good collie dog, or else cats.

2. Pigeons, like rabbits, are usually a poor hobby, although, we believe, some Americans claim there is some money in raising squabs (young pigeons) for market, in a commercial way. They are kept in special houses or lofts, harboring not more than 50 pairs in each compartment. The site should be well drained, facing the south or east, free from obstructions which shut out the morning sun, and sheltered by trees or buildings from the north and west winds. Such a place, with a shallow stream of pure running water, for drinking or bathing, will be an ideal site. Pigeons are fed twice a day, on such foods as cracked corn, red wheat, Kalix corn, millet, peas, hemp and flax.

Seed corn for ensilage or ripening, or the most approved varieties, is advertised by Mr. Geo. Keith, of the old and reliable seed house, Toronto.

Lump Jaw



The first remedy to cure Lump Jaw was

Fleming's Lump Jaw Cure

and it remains today the standard treatment, with years of success back of it, known to be a cure and guaranteed to cure. Don't experiment with substitutes or imitations. Use it, no matter how old or bad the case or what else you may have tried—your money back if Fleming's Lump Jaw Cure ever fails. Our fair plan of selling, together with exhaustive information on Lump Jaw and its treatment, is given in

Fleming's Vest-Pocket Veterinary Adviser

Most complete veterinary book ever printed to be given away. Durable, bound, indexed and illustrated. Write us for a free copy.

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45 Church Street.

SCOTCH SHORTHORNS

A fine lot of imported cows with calves at foot, from first-class imp. sires. Also a fine lot of one and two year old heifers. Three high-class young bulls of the best quality and breeding at easy prices. Am taking orders for any breed of cattle, sheep or swine to be imported in time for the exhibitions the coming season.

H. J. DAVIS,
Importer and breeder of Shorthorns and Yorkshires.
WOODSTOCK, ONT.
C. P. R. and G. T. R. Main Lines.

Spring Grove Stock Farm
Shorthorn Cattle and Lincoln Sheep



First herd prize and sweepstake, Toronto Exhibition, 3 years in succession. Herd headed by the imported **Dubbe-bred bull, Rosy Morning, and White Hall Rambold.** Present crop of calves bred by Imp. Prince Sunbeam, 1st, Toronto, 1906.

High-class Shorthorns of all ages for sale. Also prize-winning Lincolns. Apply

T. E. ROBSON, Iderton, Ont.

ELM GROVE SHORTHORNS

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

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

12 Shorthorn Bulls

Choice Scotch bred, for sale at moderate prices. For particulars, apply to

J. & W. RUSSELL, Richmond Hill, Ont.
Yonge St. trolley car from Union Station, Toronto, passes the farm.

CHAS. RANKIN, Wyebridge, Ont.

Importer and Breeder of **SHORTHORN CATTLE and OXFORD DOWN SHEEP.**

Herd headed by Pride of Scotland (Imp.).

FOR SALE—Females and bulls, of all ages, from noted Scotch families.

SHORTHORNS & CLYDEDALES FOR SALE

Bull in service: Scotland's Fame—47897—, by Nonpareil Archer (Imp.) (81778)—45202—, dan Flora 51st (Imp.), (Vol. 19) Present offerings: Two heifers rising 1 year old, two bulls rising 1 year old; also young cows and heifers of good quality and breeding, mostly well gone with calf. Also stallion rising 1 year old, sired by the well-known Macqueen, dam from imported sire and dam, and one filly rising one year, sired by King's Crest (Imp.). Will sell at a bargain if taken soon.

JOHN FORGIE, Claremont P.O. & Sta.

Queenston Heights SHORTHORNS

I am offering extra value in yearling and two-year-old heifers. Bull calves that will make high-class sires.

Straight Scotch.

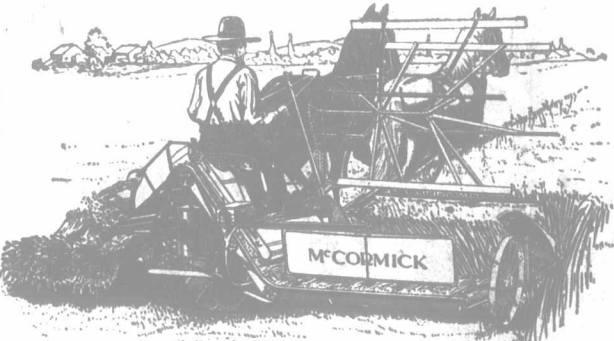
HUDSON USHER, Queenston, Ont.

GLENAYON STOCK FARM
Shorthorns and Berkshires

I have 5 Berkshire boars ready to wean, will sell them at 86, delivered to any station in Ontario; and a Shorthorn bull calf, which I will sell cheap.

W. B. ROBERTS, Sparta P.O., Station, St. Thomas, C.P.R., M.C.R., G.T.R.

The McCormick Binder



A BINDER is necessarily an important machine. All the more necessity for avoiding mistakes, by getting something of standard kind. All McCormick harvesting machines are recognized as the standard in their particular line. And especially is this true of the binder. Here are a few of the reasons why:—The main frame forms a rigid and solid foundation for the machine to rest upon. —The drive chain is strong and durable. —The machine is equipped with roller bearings. —Hence it is exceedingly light in draft. —It has an improved clutch. —Its countershaft cannot become wound with straw. —Wide range of adjustment on reel—lifts high in cutting rye and other tall grain and lowers to pick up down grain. —Both the main and grain wheels are provided with raising and lowering devices, so that

Call on the McCormick Agent for information or write nearest branch house for catalog. CANADIAN BRANCHES: Calgary, London, Montreal, Ottawa, Regina, St. John, Toronto, Winnipeg. INTERNATIONAL HARVESTER CO. OF AMERICA, CHICAGO, V. S. A. (INCORPORATED.)

ALBERTA LANDS

In sections (640 acres), half-sections and quarter-sections, in the best part of Alberta, at the lowest prices and on any terms. Write for prices and description.

FETHERSTONHAUGH & TOBIN, LEDUC, ALBERTA.

Pine Grove Stock Farm.

Breeders of High-class Scotch Shorthorns, Choice Shropshire Sheep, Clydesdale and Hackney Horses. Herd catalogue on application. Address: JAMES SMITH, Supt., Rookland, Ont. W. C. EDWARDS & Co., Limited Props. Ont.

SHORTHORN BULLS and HEIFERS

Sired by the Scotch bull, Scottish Lad 45061 FOR SALE. S. DYMENT, Barrie, Ontario.

BELMAR PARK SHORTHORNS

10 bull calves, 16 heifers under two years. All of the choicest breeding and practically all of show-yard quality. You can buy anything in the herd at a reasonable figure. JOHN DOUGLAS, PETER WHITE, JR., Manager. JOHN GARDHOUSE & SONS, Highfield P.O., Ont.

Spring Valley Shorthorns

Herd headed by Imp. Bapton Chancellor—40859—(78286). A choice lot of females, mostly with calves at foot or safe in calf. Also a good six-month-old bull calf. Inspection and correspondence invited. KYLE BROS., Agr P.O. Agr, C.P.R.; Paris, G.T.R.

Glen Gow Shorthorns

Our present offering is 9 bulls, from 6 to 14 months of age, sired by Imp. Ben Loman and Imp. Joy of Morning, and out of Imp. and Canadian-bred cows. Also a number of very choice heifers. No fancy prices asked. Long-distance telephone. W. SMITH, Columbus, P.O. Brooklin and Myrtle Sts.

Willow Bank Stock Farm

Established 1858 Shorthorn Cattle, Leicester Sheep. Imp. Rosicarian of Dalmeny—45230—at head of herd. Choice young stock for sale. JAMES DOUGLAS, - Caledonia, Ont.

Mr. A. W. Smith, Maple Lodge, Ont., writes: "The imported bull I offer for sale in my advertisement is a fine large fellow—smooth and straight and splendidly-fleshed. He is gentle, and all right in every way."

GOSSIP.

Mr. N. S. Robertson, Arnprior, Ont., breeder of Shorthorns, writes: "I am all sold out of bulls, except a very nice white one, four months old, out of one of my best cows. My crop of calves, coming in April, May and June, will all be sired by Scottish Beau (Imp.)."

MAPLE GROVE SHORTHORNS.

Maple Grove Stock Farm lies in Addington County, Ont., a short distance from Enterprise Station, on the Bay of Quinte Railway, running north from Napanee. It is the property of Mr. C. D. Wager, one of Addington's most enterprising farmers, whose splendid herd of Shorthorns now numbers 35 head, several of which are imported, among the latter being Belladonna 2nd (Imp.), by Baron of Baley, dam by Sittyton Yet; Airy Duchess 3rd (Imp.), by Pride of All, dam by Airy Monarch (she is a Broadhook); Silver Belle (Imp.), by Caledon Chief, a champion (she is a Village Maid); Winnifred 3rd (Imp.), by Spicy King; Byres Orange Blossom (Imp.), by Fitzalan, dam by Brave Archer, is an Orange Blossom; and Robina 2nd (Imp.), by Lovat's Champion. These compose the imported females of the herd, and are as nice a bunch of thick-fleshed, up-to-date type cattle as can be found together in this country—all extra good individuals, and all breeders. The Canadian-bred ones represent the Meadowflower, Jilt and Lady Eden families. The younger ones, by the stock bull, are a splendid lot, and reflect great credit on their enterprising owner. The stock bull is Lord Banff's Conqueror, bred by W. D. Platt, sired by the 35,100 bull, Lord Banff (Imp.), dam Daisy Lee—33090—, by Ivanhoe—12044—. He is an exceptionally well-put-up bull, mellow, and a wonderfully good sire, as his get are a grand lot of thick, even, good doers. In the herd are a number of young things, and anything is for sale. Enterprise is the P. O. address.

HAYNE BARTON SHORTHORNS AND LEICESTERS.

Hayne Barton Stock Farm, property of Mr. James Snell, which lies in Huron County, Ont., 5 miles north of the town of Clinton, on the G. T. R., is the home of a carefully-selected herd of Mina, Lady Jane and Rose of Sharon Shorthorns, and one of Ontario's choicest flocks of Leicester sheep. At the head of the Shorthorn herd is the massive bull, Imp. Scottish Peer, by King of Hearts, dam Martha 9th, by Ruler. He is one of the very thick, low-down sort, carrying a wealth of flesh very evenly distributed, and his get proves him to be a sire of a very high order. His predecessor, and the sire of a number of the younger females, was Star of Morning—31879—, by Riverside Stamp—23589—, dam Roan Lady, by Barmpton Hero. He belonged to the English Lady family, and was a prizewinner of considerable note. Among the females, a particularly nice one is Queen of Clinton 3rd, by Star of Morning, a big, thick, cow, and a very heavy milker. She is the dam of an extra nice eleven-month-old red bull calf, by the stock bull, that gives promise of something extra. Another splendid cow is Primrose Pearl, also by Star of Morning. She is now suckling an extra fine six-month-old bull calf, by the stock bull, that should make a winner. Besides these, in young stuff for sale, are five splendid heifers, by the present stock bull, and out of Rose of Sharon and Lady Jane dams. The large flock of Leicesters are in fine shape, and the heavy crop of lambs, many of them showing wonderful growth, are likely candidates for honors at the fall shows. Mr. Snell is now fitting up a dozen very choice ewes for a customer on the other side of the line for fall exhibition purposes. Still on hand, for sale, are a few yearling ewes, and three yearling rams. Mr. Snell reports trade in Shorthorns and Leicesters as exceedingly brisk, and the demand continually on the increase. He is now offering for sale the Clydesdale stallion, Brave Boy [2982], by the noted prizewinner, Hullet's Pride (Imp.), dam the first-prize and diploma-winner, Imp. Bessie Lee, by Bonnie Scotland. He is a grand type of up-to-date Clydesdale, very smooth and exceptionally even, and stands on a perfect set of legs. Write Mr. Snell, to Clinton P. O., Ont.

PLEASANT VALLEY SHORTHORNS

Herd headed by Imp. Old Lancaster—50068—, Grand champion, Toronto, 1905, and consisting of females of the leading Scotch families; can spare a few young cows bred to Imp. Old Lancaster. GEO. AMOS & SON, Moffat Stn. and P.O., C.P.R.

SHORTHORNS

Imp. Keith Baron 36050. Six young bulls from 10 to 18 months old. A lot of 2-year-old heifers in calf and a few young cows. A bunch of heifer calves, cheap.

GLYDESDALES

Just now: One pair of matched geldings 5 and 6 years old; show team. JAS. McARTHUR, Goble's, Ont.

Brown Lee Shorthorns—Present offering is 3 young bulls from 9 to 15 months old, a nice straight, good-doing lot, sired by Blenheim Stamp; also females of all ages, daughters of Imp. Sir Christopher and Imp. Beaucomp. Prices very reasonable. DOUGLAS BROWN, Agr P.O. and Station.

BARREN COW CURE

makes animals breed. Abortive Cow Cure prevents animals aborting. Cures guaranteed or money refunded. L. F. SELLECK, Morrisburg, Ont.

Pine Ridge Jerseys—Present offering: Some good young cows and a choice lot of heifers, all ages, from 4 months up; also some good Cotswold sheep (registered). WILLIAM WILLIS, Newmarket, Ont.

HIGHGROVE JERSEY HERD.

Our present offering is: a few choice heifer calves from 2 to 8 months old, which, considering quality, will be sold reasonable. ROBT. TUFTS & SON, Tweed P.O. & Sta.

Brampton Jersey Herd—We have now for immediate sale 10 bulls, from 6 to 18 months old, descended from St. Lambert or imported stock; also females of all ages. In order to reduce our stock, we are making a special offer. For full particulars, address, B. H. BULL & SON, Brampton, Ont. Phone 42.

An extra nice Jersey Bull, fit for yearling vice. Also two bull calves. Prices reasonable. F. S. WETHERALL, - Rushton Farm, Cookshire, Que.

Lyndale Holsteins.

A number of bull calves from one to four months old, out of Record of Merit cows, and sired by Beryl Wayne Paul Concordia, whose four nearest dams have official butter records averaging 22 lbs. 11 ozs. each. We also have three young bulls fit for service. BROWN BROS., LYN, ONT.

Glenwood Stock Farm—Holsteins and Yorkshires. Holsteins all sold out. Have a few young Yorkshires sows, about 3 months old, for sale cheap. True to type and first-class. Bred from imported stock. THOS. B. CARLAW & SON, Warkworth P.O. Campbellford Stn.

DOES YOUR HEAD

Feel As Though It Was Being Hammered? As Though It Would Crack Open? As Though a Million Sparks Were Flying Out of Your Eyes? Horrible Sickness of Your Stomach? Then You Have Sick Headache!

BURDOCK BLOOD BITTERS

will afford relief from headaches no matter whether sick, nervous, spasmodic, periodical or bilious. It cures by removing the cause. Mr. Samuel J. Hubbard, Belleville, Ont., writes: "Last spring I was very poorly, my appetite failed me, I felt weak and nervous, had sick headaches, was tired all the time and not able to work. I saw Burdock Blood Bitters recommended for just such a case as mine and I got two bottles of it, and found it to be an excellent blood medicine. You may use my name as I think that others should know of the wonderful merits of Burdock Blood Bitters."

HOLSTEINS FOR SALE

Four imported and one home-bred bulls, from 8 to 18 months old; also one entire sired by a P.O. of spring bull calves, from week old up, sired by the grandly-bred imp. bull, Sir Rowley B. Pieterie, whose dam record is over 35 lbs. milk in one day, and from great-producing cows of the most fashionable strains. Can spare a few cows and heifers, from one year up; 75 head to select from. Cheese 13c. Don't delay if you want one from this herd. H. E. GEORGE, Crampton, Ont.

WOODBINE HOLSTEINS

Herd headed by Sir Meachilde Poach, absolutely the best official-bred sire in Canada. Dam, Lanthia Jewel Meachilde, 325 pounds butter in seven days. Champion cow of Canada over all breeds. Sire's dam, Aeltie Poach 4th, holds the world's largest two-day milk test record—65 pounds butter. Young bulls of the choicest quality for sale. A. KENNEDY, Agr. Ont. Agr, C.P.R.; Paris, G.T.R.

FEW HOLSTEIN BULLS

fit for service, for sale at reasonable prices. Choice females, all ages. If you are willing to pay good prices for good stuff, write me. G. W. CLEMENS, St. George, Ont.

MAPLE GROVE HOLSTEIN-FRIESIANS

For Sale: Three bull calves, sired by Lord Wayne Meachilde Calamity, and all out of Advanced Registry cows. Apply WILBURN RIVERS, Falden's Corners.

Maple Glen Holsteins—At present we can offer three sons of Sir Altra Poach Butte, whose granddam holds world's largest official record for her age, and his grand sire now has over 60 tested A. B. O. daughters—the most by any bull yet on record—and he is a brother of Aeltie Cornucopia, the champion record cow of the world. Secure the best. C. J. GILROY & SON, Glen Buell, Ont.

Grove Hill Holsteins—Herd contains 55 head, a number of which are in the advanced registry. Our stock bulls have all been backed up by high records. Present offering: Several young bulls and a few females. F. R. MALLORY, Frankford P.O. and Sta., C.P.R.

IMPERIAL STOCK FARM HOLSTEINS

A prizewinning herd of imported, officially tested stock. Bulls of all ages for sale, also a few cows. W. M. SIMMONS, New Durham, Ontario.

"GLENABOY" HOLSTEINS

We have for immediate sale several young bulls, and a number of young females, that for ideal type and superior quality, backed up by splendid breeding, are unsurpassed. G. HAGSTYER, Hanover P.O. and Sta.

Holsteins, Tamworths, Oxford & Dorset SHEEP FOR SALE

At present we have 1 young bull, 8 Oxford ram lambs, Dorsets, 1 yearling and 1 aged ram, Tamworths, both sexes. J. A. Richardson, South March P.O. and Sta.

Hilton Stock Farm Holsteins, Cotswolds

Present offering: Some choice heifer calves; young boys fit for service; young sows ready to breed, and younger ones at reasonable prices. R. O. MORROW, Hilton P.O., Brighton Tel. & Sta.

HOLSTEINS AND YORKSHIRES

R. HONEY, Brimley, offers for sale a choice lot of young boys fit for service; also sows ready to mate.

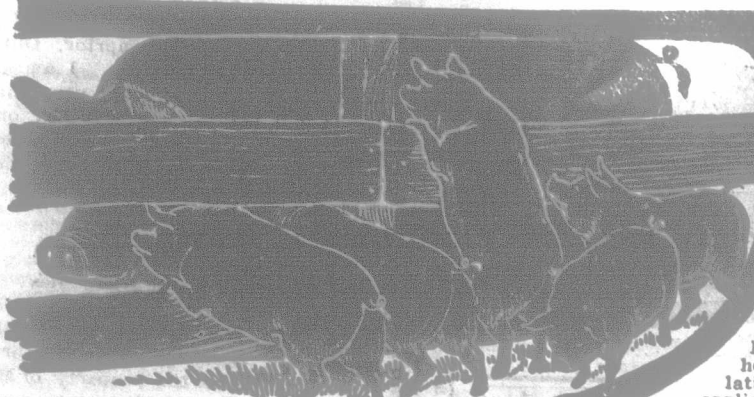
GOSSIP.

Mr. J. B. Hogate, Weston, Ont., the well-known importer, writes: "I am pleased to report to you that trade has been very good this fall and winter. I have sold 42 horses in all, and at very satisfactory prices. I have left on hand, for sale, two Percherons, two Clydesdales, one Shire, and two three-year-old Hackney stallions that I will sell at a bargain before the season opens, to make room for my next shipment that is soon to arrive."

Mr. A. Edward Meyer, Guelph, Ont., writes: "The demand for well-bred, good young Shorthorn bulls has been exceptionally brisk. I was induced to part with the three-months-old Campbell Claret calf, Claret's Hero, to R. McCorkindale, of Guelph. This is a dark roan youngster of great promise. He is the oldest calf I have; sire by Scottish Hero (imp.), and is out of Claret's Pride, one of the plums of my herd. To Mr. Edwin Christian, Sundridge, Ont., I have sold the nine-months-old heifer, Duchess of Sunny Slope 2nd, a very thick, even red calf, sired by Lovely Prince, a Cruickshank Lovely, and out of Duchess of Waterloo 2nd, the best milker I ever owned. I intended to keep this heifer in my herd, but Mr. Christian liked her so well that I was induced to part with her."

HAWTHORNE SHORTHORNS.

Thirty years ago, Mr. Wm. Granger, the senior member of the firm of Wm. Granger & Son, London, Ont., owners of that beautiful and well-equipped stock farm, Hawthorne, laid the foundation of what is now one of the noted Shorthorn herds in Ontario by the purchase of Fair Maid of Atha 2nd, by Proud Duke =991, dam Fair Maid of Atha, by Highland Chief =701, she tracing to Princess (imp.) =419, a grand cow of the dual-purpose sort, and it is doubtful if in Ontario a better herd of dairy Shorthorns can be found, with such cows as Fair Maid of Hullet, with a butter record of 17 lbs. in 7 days; Fair Maid of Hullet 2nd, with a butter record of 16 lbs. in 7 days, and Red Britannia 4th, by Beau Ideal 22554, as nice a type of true dairy conformation as can be seen in any herd of the breed, carrying immense udder, and being a very heavy milker. Out of her is a two-year-old heifer and a yearling bull, both by Prince Misty, and now suckling an extra nice bull calf, by the present stock bull, Imp. Aberdeen Hero. Few men in the business have been more particular in the selection of a stock bull than Mr. Granger, and when he found what suited him, he secured him regardless of cost. All the one, two and three-year-olds in the herd are the get of the richly-bred Missie bull, Prince Misty =37864, by Prince Rosquet (imp.), dam Mistie 21st, by Nonpareil Victor, a bull that left an indelible stamp of superiority on the herd. The present stock bull, Aberdeen Hero (imp.), is by Reveller, dam Madge, by Queen's Guard. He is a Matilda-bred bull, has been shown 21 times, and won 21 first prizes, which is all that need be said of his individuality, while as a stock-getter he stands in the very front rank. Among the younger bulls are four yearlings, all the get of Prince Misty, and out of deep-bodied, thick-fleshed and very heavy-milking dams; also there are two-year-old bulls, bred the same, having little to be desired in their make-up, and being bred on such producing lines are very desirable as herd headers, and especially of dual-purpose herds. Mr. Granger is daily receiving enquiries for bulls, and at the time of our visit was shipping one to Strathroy and another to Manville, Alberta. Parties wanting such should not delay in making their selection. Besides these, there are several one and two-year-old heifers, a nice, thick, straight-lined lot, all the get of Prince Misty, and all old enough are in calf to the present stock bull—heifers bred from heavy-milking dams, and themselves showing conformation that will almost certainly develop into heavy-producers. Although during all these years this herd has always been Scotch-topped, they still retain their dairy conformation, coupled with thick, broad, level backs, and from 1,500- to 1,800-lb. carcasses, which makes the ideal Shorthorn for the general farmer. Write Mr. Wm. Granger & Son, London, O., Ontario.



Pigs At Weaning Time

Stand a chance of slow development for a time. Grain or sour milk is harder to digest than the milk of the dam. The digestive organs require special aid at this time. As the feeding period of the hog is short—and the shorter the better—it is expedient to strengthen and build strong every digestive organ while the pig is young. Dr. Hess Stock Food, the great hog tonic, makes pigs grow fast, healthy and strong; expels worms, aids digestion and assimilation and causes the maximum amount of the nutrition to be applied to bone and muscle building. Stockmen must remember that it is not the food consumed but the food digested that produces the profit. Increasing the digestive capacity of stock of all kinds, according to the recognized medical authorities, can be produced by the action of bitter tonics, iron and other medicines such as are contained in

REMEMBER:

That from the 1st to the 10th of each month, Dr. Hess will furnish veterinary advice and prescription free

If you will mention this paper, state how much stock you have, also what stock food you have fed, and enclose two cents for reply. In every package of Dr. Hess Stock Food there is a little yellow card that entitles you to this free service at any time.

Instant Louse Killer Kills Lice.

DR HESS STOCK FOOD

the prescription of Dr. Hess (M. D., D. V. S.). Remember it is equally valuable for Horses, Cattle, Hogs, Sheep and Milch Cows. The ingredients of Dr. Hess Stock Food have the endorsement of the Veterinary Colleges and the Farm Papers. Recognized as a medicinal tonic and laxative by our own government, and sold on a written guarantee at 7¢ per pound in 100 lb. sacks; 25 lb. pail \$2.00. Smaller quantities at slight advance. Duty paid. A tablespoonful per day for the average hog. Less than a penny a day for horse, cow or steer. If your dealer cannot supply you, we will. Dr. Hess Stock Book free, if you will mention this paper, state how much stock you have and what kind of stock food you have used.

DR. HESS & CLARK, Ashland, Ohio, U. S. A. Also manufacturers of Dr. Hess Poultry Pan-a-c-c-a and Instant Louse Killer.



Burnside Ayrshires

Imported and Canadian-bred. Prizewinners at all the leading shows. I hold the award of merit given by the Bd. of Dir. of World's Fair, St. Louis, to the breeder of largest number of prizewinning Ayrshires at said Exposition. Females of all ages for sale, imported and Canadian-bred.

R. R. NESS, JR., HOWICK, QUE., P. O. AND STATION. Any orders sent me during my stay in Scotland, care of A. MITCHELL, ESQ., Barcheskite, Kirkcudbright, Scotland, will have my careful attention.

ANNANDALE HOLSTEIN HERD

Have won during the past show season at Ottawa first and sweepstakes on cow, first on 3-year-old, first on 2-year-old class. At Guelph (dairy test) first and sweepstakes on cow, first and second in heifers. At Chicago (National) first and sweepstakes on cow, also second-prize cow, second and third on 2-year-olds, second on 1-year-old heifers, and a host of other prizes (different cows at different shows). Bull calves, 4 months and under only, for sale from great dams and greatest of sires. Buy young if you want them from Annandale Stock Farm.

GEO. RICE, Tillsonburg, Ont.

HILL AND CENTRE VIEW HOLSTEINS 85 head. Stock bulls bred on high-producing lines. Official records 15 to 22 1/2 lbs. 30 bulls, 4 to 16 months, by our stock bulls, out of Advanced Registry dams. Females, all ages. Write quick. Guaranteed as represented. P. D. EDE, Woodstock Station.

HOLSTEINS AND CHESTER WHITES. Our Holsteins are producers and prizewinners. Young bulls and a few choice heifers for sale, also some extra good young Chester White pigs, both sexes. D. S. GOODERHAM, Thornhill P. O. G. T. B. and street cars.

Wardend Ayrshires We are offering young bulls from 1 to 2 years old; also a choice lot of spring calves from deep-milking dams. Sired by White Prince of Menie No 1826; bred by A. Hume, Menie, F. W. TAYLOR, Wellman's Corners, Hoard's Stn., G. T. R.

SPRING BURN STOCK FARM, North Williamsburg, Ont. H. J. WHITEKER & SONS, Props., Breeders of Pure-bred Ayrshire Cattle, Oxford Down Sheep, Berkshire Pigs and Buff Orpington Fowls. Young stock for sale. Eggs for hatching, \$1 for 13, and \$4 per 100.

HIGH-CLASS AYRSHIRE CATTLE Bulls and heifer calves, two to nine months old, cows and heifers all ages. Prizewinners from this herd include Tom Brown and White Floss, sweepstakes at Chicago. DAVID BENNING & SON, "Glenhurst," Williamstown, Ont.

Weidpath Ayrshires. My offerings include a very choice 16-months-old bull; a few Aug. and Sept., 1905, bull calves from daughters of imp. cows; and a special low price for a bunch of March calves (90 per cent. bulls). W. W. Ballantyne, "Weidpath Farm," Stratford, Ont.

STOCKWOOD AYRSHIRES FOR SALE Have some nice February calves for \$20 each, out of heavy milking dams. Sire Pearl Stone of Glenora; also some nice young cows and heifers. D. M. WATT, Allan's Corners, Que.

AYRSHIRES

The famous Reford Herd at St. Anne de Bellevue, Que., now owned by Sir William C. Macdonald.

Several yearling bulls for sale; also a number of bull calves, Quality and appearance extra good, bred from the best milking strains, noted for robust constitution and large tests. For particulars apply to

MACDONALD COLLEGE St. Anne de Bellevue, Quebec.

AYRSHIRES and YORKSHIRES

An August, 1904, bull of a choice dairy strain. A March, 1905, bull calf, very stylish, a winner. Several young calves of good breeding; cheap to quick buyers. Some real good 2-year-old heifers in calf. Orders booked for young pigs. Correspondence solicited.

ALEX. HUME & CO., Menie P. O., Ont.

Ayrshire Bulls

For Sale 12 Ayrshire bulls one to two years old. Bred from deep milking stock, both by sire and dam. Price reasonable. Correspondence and inspection solicited.

W. Owens, Monte Bello, Que. Riverside Farm,

Maple Cliff Dairy and Stock Farm Breeders of Clydesdale Horses, Ayrshire Cattle, Berkshire and Tamworth Pigs. Young stock for sale at all times. R. REID & CO., Hintonburg, Ont. Farm adjoins Central Experimental Farm.

AYRSHIRES—Choice stock of either sex, different ages, for sale. Prices reasonable. For particulars apply to N. DYMENT, Hickory Hill Stock Farm, Dundas Stn. & Tel. Clappison, Ont.

FAIRVIEW SHROPSHIRE Have the world's record for the largest per head winners at the greatest of world's fairs—St. Louis. Also have the record for their 22 years in the leading show-rings, including three world's prizes, of winning more first and champion prizes than all competitors combined. Do you need a few real good cows? Or a choice ram to head your flock? If so, write for names and quotations to

JOHN CAMPBELL, Fairview Farm, Wood, Ont.

HAMPSHIRE SHEEP DOWN

"Reserve" for Champion in the Short-wool Classes, Smithfield, London, 1904

SPLENDID MUTTON GOOD WOOL GREAT WEIGHT

This highly valuable English Breed of Sheep is unrivaled in its

Wonderfully Early Maturity. Hardiness of constitution, adapted to all climates whilst in the quality of mutton and large proportion of lean meat it is unsurpassed, and for crossing purposes with any other breed unequalled. Full information of

JAMES E. RAWLENCE, Secretary Hampshire Down Sheep Breeders' Association, Salisbury, England.

Southdown Sheep

Unequaled for fine quality of both mutton and wool, hardiness of constitution, and earliness of maturity.

STRIDE & SON will sell by auction at CHICHESTER, on

THURSDAY, AUG. 9th, 1906 (the day after the dispersal of the whole of Mr. Edwin Ellis's world-renowned prizewinning Messrs. Stride & Son, Summerville, Guildford, on Wednesday, August 8th) about

6,000 PURE-BRED SOUTHDOWN EWES 450 PURE-BRED SOUTHDOWN RAMS and RAM LAMBS,

Including consignments from nearly all the leading registered flocks in England. Commissions carefully executed. Telegrams, STRIDE, Chichester. Postal address:

STRIDE & SON, Chichester, Sussex, England.

The Riby Herd and Flock of Shorthorn Cattle and Lincoln 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 1,000-guinea rams, and also the heaviest sheep at Chicago Show, 1903. Selections for sale. Cables—DUDING, KEELBY, ENG.

Cattle and Sheep Labels Do not be without these useful stock marks. Write to-day for circular and sample. F. G. JAMES, Bowmanville, Ont.

MEN



You are Cured First,
Then You Pay.
If You are not Cured
You Need Not Pay.
NERVOUS DEBILITY

The Latest Method Treatment is a heaven-sent boon to nervous sufferers. There are scores and hundreds of persons suffering from severe nervous disorders resulting from overwork, hurry, worry, business and domestic cares, bereavements, dissipation, etc. To them life is one continual round of misery, while peace, comfort and happiness are impossible. They suffer from headaches, dizziness, restlessness, irritability, constant indecipherable fear, forebodings, sleeplessness, weakness, trembling, heart palpitation, cold limbs, utter fatigue and exhaustion. In this class of cases almost immediate relief is afforded by my treatment.

DR. S. GOLDBERG.

Located in Detroit Since 1895. The possessor of 14 Diplomas and certificates; makes Diseases of Men a specialty; and allows the patient to pay after cured.

BLOOD POISON

If you have trace of it you are in constant danger until cured; you cannot tell how soon the poison will affect the other organs of the body; have you sore throat, ulcers in the mouth of tongue, copper colored patches, sores breaking out, sore bones, hair falling out, itching skin? Call to see me, and receive a written guarantee of a cure, PAYING FOR SAME WHEN CURED.

I CURE NERVOUS DEBILITY, VARICOCELE, STRICTURE, EARLY DECAY AND WASTE OF POWER, ALL NERVOUS, CHRONIC, BLOOD AND SKIN DISEASES.

X-RAY EXAMINATION, ADVICE AND CONSULTATION FREE.

Office hours from 9 a. m. to 11:30; from 1 to 4:30, and in the evening from 6 to 7:30; while on Sundays from 9:30 a. m. to 2:30 p. m.

Patients who cannot call may write for question blank and book containing diplomas free; everything held sacredly confidential. Medicine for Canadian patients shipped from Windsor, Ont. All duty and transportation charges prepaid.

DR. GOLDBERG, 208 Woodward Ave. Suite 632, DETROIT.

SAVE 20 CENTS PER SHEEP on every sheep you shear with STEWART'S IMPROVED 1904 SHEEP SHEARING MACHINE

For sale by all leading jobbers. The day of the old-fashioned hand shears is past. No owner of 10 sheep or more can afford to shear by hand, even though the work be done by a shearer. Don't butcher your sheep. Shear with machine and get one pound of wool extra per head. It will more than cover the cost of shearing, and to-day for valuable book, "Hints on Shearing." It is free, and will save you money.

CHICAGO FLEXIBLE SHAFT CO., 110 LaSalle Ave., Chicago.

Price in Canada: **\$17**

Kent or Romney Marsh ANNUAL RAM SALE.

The annual show and sale of registered Kent or Romney Marsh rams, consisting of selected specimens from the leading flocks of the breed, will be held on

FRIDAY, SEPT. 28, 1906, at Ashford, Kent, England.

Catalogues and full information from

W. W. CHAPMAN,
Secretary Kent or Romney Marsh Sheep Breeders' Association,
Mowbray House, Norfolk Street, Strand, London, England, W. C.

Shropshire & Cotswold Sheep SCOTCH SHORTHORNS and CLYDESDALES

Choice ram and ewe lambs. Also 50 shearing ewes for sale. Apply to

JOHN BRIGHT,
Myrtle Station, Ontario.

LINCOLN LONG-WOOL SHEEP BREEDERS' ASSOCIATION Lincoln Ram Sales, 1906

The 22nd and 23rd sales of Lincoln Long-wool rams by members will be held in **LINCOLN, ENG.**, as follows:

August 3rd, 1906 (if at least 50 rams are entered).

Sept. 7th, 1906, up to 400 rams.

The sheep will be penned on view in the afternoon before each day of the sale.

WILLIAM FRANKISH, Secretary,
St. Benedict's Square, LINCOLN, ENG.

BROAD LEA OXFORDS.

Present offerings are 28 ranch shearing rams, seven shearing ewes, one show ewe four years old. Will also book orders for ewe and ram lambs from imported ram.

Correspondence promptly answered. Visitors always welcome.

R. R. Stations: **W. H. ARKELL,**
Midway, G. T. R. Teeswater, C.P.E. Teeswater, Ont.

DORSET HORN SHEEP and SCOTCH SHORTHORNS

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

JOHN A. MCGILLIVRAY,
North Toronto, Ontario

SOUTHDOWNS COLLIES

Having sold short, I am now booking orders for future delivery of show and breeding flocks.

At Stud, Holyrood Oinker,
Just imported. Fee \$10.00.

Robt. McEwen, Byron, Ont.

Seed Grains and Dorset Horn Rams

Emmer and Tartar King oats. All grains well cleaned. Write for samples and prices.

Glenairn Farm, **JAMES DICKSON, Grono, Ont**

GOSSIP.

The champion Shorthorn at the Cork, Ireland, Spring Show, last month, was Miss Staples' (Dunmore) massive Linksfield Champion (86401), a roan calved May, 1903, and sired by Scottish Prince (82270), bred by Mr. R. Bruce, of Heatherwick, a son of Prince of Archers (71240). Linksfield Champion, judging from his portrait in the Farmers' Gazette, of Dublin, is an ideal Shorthorn of the approved modern type, full of character and quality.

Volume 4 of the Canadian Holstein-Friesian Herdbook has, by courtesy of the Secretary and editor, Mr. G. W. Clemons, St. George, Ont., been received at this office. It is a creditable volume of over 425 pages, containing the pedigrees of 520 bulls, numbering from 3,239 to 3,739, and 732 females, numbering from 4,931 to 5,668, a total of 1,252 animals, a very long list of transfers, and a list of cows in the Record of Merit by official test and performance, also a list of members, besides the constitution and by-laws of the Association.

Mr. R. Keevil, breeder and importer of Shires and Hackneys, whose stables are at H. George & Son's stock farm, Crampton, Ont., writes: "I have every confidence in saying that two of the finest Hackneys ever imported to this country are now at my stables. They arrived here in good condition, April 20th. One of these Hackneys, Leyswood Gordon 7151, is one of the most brilliant horses of the breed. His shape and carriage are well-nigh perfection. He has proved himself an extraordinarily sure foal-getter, and holds a veterinary certificate of soundness. He is a beautiful, up-standing bay horse, seven years old, 15.3 hands high, with excellent bone and substance. His sire, Garton Duke of Connaught 3009, is a winner of numerous prizes, including champion cup and silver medal in classes 11 and 12, London Hackney Show, 1898, against 58 entries, and has sired 176 winners at the London shows. Leyswood Gordon's dam, Lady Gordon 4097, was winner of prizes in 1889, and her sire, General Gordon 2084, was first in London (Eng.) Show, and reserve champion, cup and silver medal, against 83 entries, and reserve challenge cup and gold medal, against 219 entries. Leyswood Gordon himself has only been beaten by the world-renowned champion Hackneys, Copper King and Diplomatist. Such a horse as this is reasonably sure to get a mover, no matter what the mare may be. The other horse, Blagdon Highflyer II, is also a typical Hackney, three years old, a grand mover, with beautiful, hard, flat bone, and that masculine character that is indispensable in the making of a first-class sire. He is an improver, exceptionally well bred, and will be a credit to both buyer and seller. My first importation of any quantity, arrived here at the beginning of this year, and every horse has sold well, including Hackney and Shire stallions and stallion colts. Why I have been successful is because I followed the same lines upon which we conduct our business in the Old Country. Our last sale there was Blagdon Benefactor, bred by ourselves (Clement Keevil & Sons), and sold for \$5,000. What we aim at is: Weight, with quality and breeding, with perfect pasterns and feet, then we insert an advertisement in the best advertising medium. This time it is 'The Farmer's Advocate' which we have to thank for the numerous enquiries resulting in many sales. Sold to-day to Messrs. Ferguson & Son, of Carlow, near Goderich, the two-year-old Shire stallion, Blagdon Stonewall, a famous young horse, and no better-bred colt has ever entered this country. He is inbred to the great champion, Harold, and consequently has two crosses of that wonderful Shire stallion, Lincolnshire Lad II. Mr. Ferguson has shown considerable pluck in investing in such a noted colt, and has conferred a great benefit on the farmers of his locality, for such breeding and quality as Blagdon Stonewall has is sure to tell. I still have on hand, besides the two Hackneys referred to, Medbourne Heirloom, prizewinner at the recent Toronto Show, also a dandy-bred two-year-old stallion, dark brown, and having an unusual quantity of hard, flinty, fat, smooth bone."

CURED HIS WIFE of LA GRIPPE

Quebec Man tells how the Great Consumptive Preventative was an all-round Benefit

"My wife took La Grippe when she was in Ottawa," says R. N. Dafoe of Northfield Farm, Que., in an interview. "She got a bottle of Psychine and after using it for a few days she was quite well. I took a cold and am using it and am getting all right. I think Psychine is one of the best tonics on the market to-day."

There you have the whole matter in a nutshell. La Grippe and colds are among the forerunners of consumption.

This man had one, his wife had the other. Psychine not only cured both but it built them up so that their bodies are strong enough to resist disease. All seeds of consumption are killed by

PSYCHINE

50c. Per Bottle

Larger sizes 21 and 62-oz. bottles. DR. T. A. SLOGUN, Limited, Toronto.

Asthma CURED TO STAY CURED.

We give prompt relief and permanent freedom from Asthma. Our latest Book, No. 57F, will be mailed on request.

DR. HAYES, Buffalo, N. Y.

GOTSWOLD SHEEP

From one of the largest breeders in the home of the breed. We have bred the prizewinners at the leading English shows. Address:

W. HOULTON, Broadfield Farm, Northwich, Cheshire, ENGLAND; or S. HOULTON, Calgary, ALBERTA, Canadian representative.

NEWCASTLE HERD OF Tamworth Swine and Shorthorn Cattle

Boars ready for service, and sows bred and ready to breed, and a whole lot of beauties from 3 to 4 months, both sexes. Pairs supplied not skin. Our younger stock are mostly all the get of Newcastle Warrior, winner of sweepstakes and silver medal at Toronto, 1905. We also offer our present stock bull, Donald of Hillhurst, No. 44680, son of Imp. Joy of Morning, as his heifers are now of breeding age, together with a few choice heifers and cows in calf to above bull. All inquiries answered promptly. Daily mail at our door.

GOLWILL BROS., Newcastle, Ontario.

Mount Pleasant Herd of Tamworths and Holsteins. A large herd of choice pigs of all ages on hand. Mount Pleasant type of hog are profitable breeders and ideal bacon hogs. Pairs not skin. Herd headed by Colwill's Choice No. 1348. Won sweepstakes and silver medal at Toronto, 1901-23. Also a few bulls.

Bertram Hoskin, The Gully

GLENHODSON YORKSHIRES AND POULTRY.

Sows bred or ready to breed, from choice imp. stock, also young pigs, for sale. Buff Orington, B. P. Book and White Wyandotte eggs for hatching at \$1 for 15.

GLENHODSON COMPANY, Myrtle Station, Ont.
Long-distance phone at farm. Lorne Foster, Mgr.

Glenburn Herd of YORKSHIRES

Now on hand, a number of sows, 5 and 6 months old, for spring farrow; also a large number of September sows and boars. Booking orders for spring pigs.

DAVID BARR, JR., Box 1, Renfrew, Ont.

Rosebank Herd of LARGE ENGLISH BERKSHIRES

Present offering: Choice stock from 6 weeks to 5 months old, sired by Concord Professor and Willow Lodge Crown Sh. Can supply pairs and trios not skin. Satisfaction guaranteed. Express prepaid.

JAMES BOYD, JR., Rosebank, Ont.

IMPROVED YORKSHIRE'S FOR SALE

Just weaned; also pairs not skin for May breeding.

GEO. M. SMITH, Haysville, Ont.

GOSSIP.

ACCOUNTED FOR.

Mrs. M.'s patience was much tried by a servant who had a habit of standing around with her mouth open. One day, as the maid waited on the table, her mouth was open as usual, and her mistress, giving her a severe look, said: "Mary, your mouth is open." "Yesum," replied Mary, "I opened it."—Everybody's Magazine.

At the International Sunday-school Convention, at Louisville, Ky., in answer to the roll-call of States, reports were verbally given by the various State chairmen. When the Lone Star State was called, a brawny specimen of Southern manhood stepped out into the aisle, and with strident voice exclaimed: "We represent the great State of Texas. The first white woman born in Texas is still living—she now has a population of over three millions."

There was a pause of bewilderment for a moment, and then a voice from the galleries rang out clear and distinct: "Send that woman out to Wyoming—we need her!"—Under the Spreading Chestnut Tree, in Everybody's Magazine for May.

FACTS

A Canadian newspaper man, possessed of a swarthy complexion, tells this joke on himself:

Early this spring I was out in the woods one day, and towards evening went into a country station to wait for a train. A couple of ladies were there with their young hopefuls, one a boy about five years old. After talking a while to the youngster, there was a lull in the conversation, during which he eyed me curiously. Finally, he said: "Your face is black; there must be some nigger in you," which, under the circumstances, was, perhaps, excusable in the child, but the cap sheaf was placed when his mother, to patch up the break, remarked: "That boy always says what he thinks."

GOOD ADVICE.

Sydney Fisher cut the following from a newspaper, and preserved it for himself: "When you rise in the morning, form a resolution to make the day a happy one to a fellow-creature. It is easily done. A left-off garment to the man who needs it, a kind word to the sorrowful, an encouraging expression to the striving—trifles in themselves as light as air—will do at least for the twenty-four hours. And if you are young, depend upon it, it will tell when you are old; and if you are old, rest assured it will send you gently and happily down the stream of time to eternity. By the most simple arithmetical sum look at the result. If you send one person, only one, happily through each day, that is three hundred and sixty-five in the course of the year. And suppose you live forty years only after you commence that course of medicine, you have made fourteen thousand six hundred beings happy, at all events for a time."

OUR HARDWOOD SUPPLIES NEARLY EXHAUSTED.

Editor "The Farmer's Advocate":

We consume from 7 to 10 million feet of lumber per annum. We purchase in the Canadian market all the suitable lumber we can obtain, but we are unable to import a large amount of hardwood lumber and its substitutes from the United States. The supply of hardwood lumber, and some of the softwood grades, such as basswood, is fast becoming very scarce and difficult to obtain at any price in the Canadian market.

We are not in a position to contrast the present prices for lumber with those prevailing ten, twelve or thirty years ago in Canada, but from what we can learn, it would appear to us that the prices of some kinds of hardwood lumber has more than doubled during the past twenty or twenty-five years.

We trust that your efforts to have some action taken to preserve the forests and reforest the timber lands in Canada may meet with success.

INTERNATIONAL HARVESTER CO. OF CANADA, Limited, Hamilton, Ont.



I GIVE MY ELECTRIC BELT ON TRIAL UNTIL YOU ARE CURED

I believe in a fair deal. If you have a good thing and know it yourself, give others a chance to enjoy it in a way they can afford.

I've got a good thing. I'm proving that every day. I want every weak, puny man, every man with a pain or an ache, to get the benefit of my invention.

Some men have doctored a good deal—some have used other ways of applying electricity—without getting cured, and they are chary about paying money now until they know what they are paying for.

If you are that kind of a man, this Belt is yours without a cent of cost to you until you are ready to say to me, "Doctor, you have earned your price, and here it is."

That's trusting you a good deal and it is showing a good deal of confidence in my Belt. But I know that most men are honest, especially when they have been cured of a serious ailment, and very few will impose on me.

As to what my Belt will do, I know that it will cure wherever there is a possible chance, and there is a good chance in nine cases out of ten.

So you can afford to let me try anyway, and I'll take the chances. If you are not sick, don't tangle with me, but if you are, you owe it to yourself and to me, when I make an offer like this, to give me a fair trial.

I want you to know what I have done for others.

Dr. McLaughlin:

Dear Sir,—I must apologise for being so long in answering your letter, and, at the same time, I must say that I was surprised to receive same, asking for results by the use of your Electric Belt. It must be fully two years ago that I wrote you to the effect that the Belt did the work O.K. I wore it then for some time, and gradually, but surely, both rheumatism and weakness disappeared, until I laid the Belt aside, and have proclaimed it a real cure. Yes, the Belt cures.

I wrenched my back last fall, and immediately applied the Belt, and am again well. I repeat it.—I believe the Belt is a wonderful appliance for the relief of suffering humanity. I have recommended your treatment to a young lady, who has a very severe case of rheumatism. I hope that through the use of your Belt you may be enabled to give her the required cure.

Yours truly, G. DUVAL, Grand Mere, Que. CURED OF RHEUMATISM 3 YEARS AGO AND NEVER HAD A RETURN OF IT.

Dr. McLaughlin: Collingwood, Ont., Dec. 16, 1905. Dear Sir,—I must say that your Belt has done me a lot of good since wearing it. I have never been troubled with rheumatism. I find the Belt just the thing to do as you say. I have lent it to others, and they speak well of it.

Wishing you every success, I remain, yours truly, JOHN CRAWLEY.

If you would believe the thousands of men whom I have already treated, my Belt is worth its weight in gold.

But some men don't believe anything until they see it. That's why I make this offer. I want to let you see it, and feel it, and know it by your own experience before I get a cent.

If I don't cure you my Belt comes back to me and we quit friends. You are out the time you spend on it—wearing it while you sleep—nothing more.

But I expect to cure you if I take your case. If I think I can't cure you I'll tell you so, and not waste your time. Anyway, try me, at my expense.

Call To-Day Come and see me you what I have, or if you can't, then cut out this coupon and send it in. It will bring you a description of my Belt and a book that will inspire you to be a man among men, all free. My hours, 9 a.m. to 6 p.m.; Wednesday and Saturday to 9 p.m.; Sundays 10 to 1.

Put your name on this coupon and send it in.

Dr. M. S. McLaughlin, 112 Yonge St., Toronto

Send me your Free Book, closely sealed, and oblige.

NAME

ADDRESS

BERKSHIRES

Imported and Canadian-bred H. M. VANDERLIP, Gainsville, on T. H. & B. and B. & G. division of Grand Trunk. Telephone and telegraph, Gainsville, Ont.

HILLCREST HERD OF ENGLISH BERKSHIRES

For Sale: A lot of very choice young things of various ages. We prepay express charges and guarantee satisfaction. Enquiries promptly answered. Vine St., G. T. R., near Barrie. JOHN LAHMER, Vine P.O., Ont.

RIVER VIEW FARM

ROBERT GLARKE Importer and Breeder of Chester White Swine Pigs shipped not akin to each other. For price and particulars, write 41 Cooper Street, OTTAWA, ONT.

WOODSTOCK HERD OF BERKSHIRES

A few fall pigs left, sired by Imp. Polgate Doctor. Also am booking orders for spring pigs, for which I can supply pairs not akin at reasonable prices. Imp. Polgate Doctor. DOUGLAS THOMSON, Woodstock, Ont.

YORKSHIRES

Two grand (imp. in dam) sows, bred to farrow in June, to a show boar; also a young litter ready to ship in April. Orders booked ahead and satisfaction guaranteed. L. HOOEY, Pelee's Corners P.O. Fincelon Falls Station.

LARGE ENGLISH YORKSHIRES

Pigs of the most approved type, of both sexes, all ages, for sale at all times. We have more imported animals in our herd than all other breeders in Canada combined. We won more first prizes at the large shows this year every first but one and all silver medals and medals we furnished all the first-prize hogs in the breeding classes except two; also supplied both champion and grand champions. Prices reasonable. D. C. FLATT & SON, Millgrove, 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; pigs not akin; express charges prepaid; pedigrees and safe delivery guaranteed. Address: E. D. GEORGE, Putnam, Ont.

Oakdale Berkshires

Of the largest strain. 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.

MONKLAND YORKSHIRES

Imported and Canadian-bred. We keep 35 brood sows, and have constantly on hand between 100 and 200 to choose from. Can supply pairs and trios not akin. Quality of type unsurpassed. Prices right. JAS. WILSON & SONS, FERGUS, ONT. G. T. R. and C. P. R. Long-distance Phone

Ohio Improved Chester Whites

100 Pigs to Offer of the long, deep, heavy sort. Breeding stock selected from the most noted families, with a view to size and quality. Booking orders for choice spring pigs; also a few fall pigs for sale. Pairs furnished not akin. Express charges prepaid. Pedigrees and safe arrival guaranteed. H. E. GEORGE, Crampton, Ont.

Blmfield Yorkshires

Have still a few choice young boars from Summer Hill Chester, some young sows from imp. sire and dam; also a fine lot of suckers coming on. A few sows 7 months old, bred again. G. E. HUMA, Apr P.O. Apr and Falls stations.