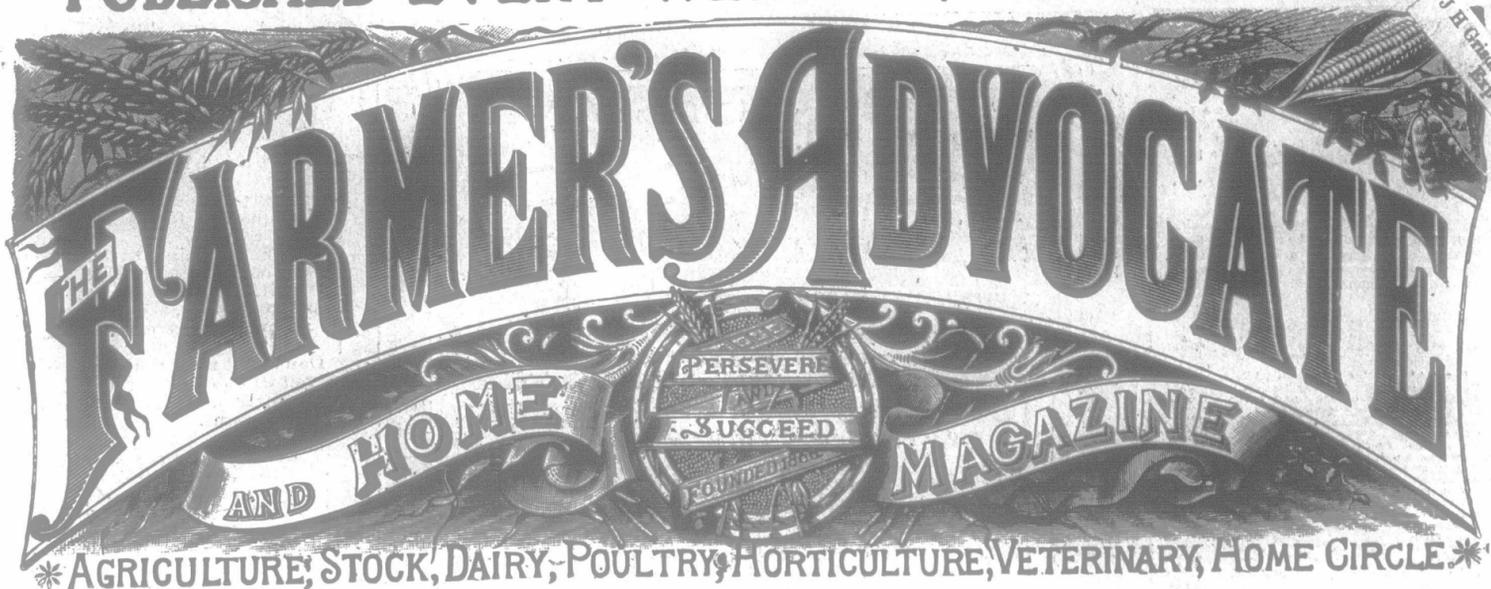


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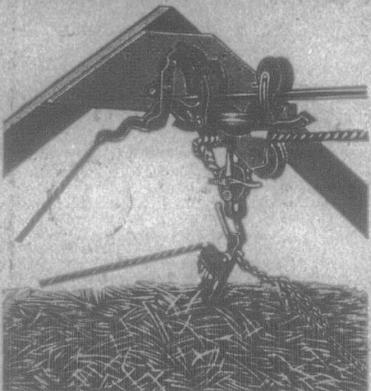
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Absolutely new varieties.
The selection from over 500 sorts from the seeds ball.
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GET RID OF BLIGHT and ROT.
Ontario and the Eastern Provinces have in these New Seedling Potatoes the best opportunity to rebuild their Seed stock, as they possess exceptional merit in themselves; besides being grown in the finest potato soil in the world, with immunity from bugs and summer blight and rot unknown, their vitality is the strongest.

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The phenomenal yielder, producing 30 to 50 per cent. more than any other variety we know of. Splendid keeper, of finest quality, pink-russety skin.

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Remarkable keeper, of finest quality—better than newly dug potatoes in July following—2 to 3 eyes to the tuber—heavy yielder—a most beautiful potato, with pink, slightly russeted, skin.

PRICES: Either variety, 1 lb., 35c.; 4 lbs., \$1.10, postpaid; peck, \$1.75; bush, \$2.50; bush, \$4.50, by express.

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Correspondence solicited.

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Sold direct from the manufacturer to the consumer. For the past 20 years that we have been in business, agents' fees and collections have cost us between 25 and 40% of our sales. To farmers and others who contemplate using cement the coming season, we intend to make this saving for you, and sell strictly for cash. Cement put on cars here at our works for 70c. per barrel. Write us for freight rates and any other information you may require.

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FROM **GEO. KEITH**
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Finest quality Red Clover, "Sun" brand, per bush, \$4.00
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OF

**47 Scotch and
Scotch-Topped Shorthorns**

Clydesdale Mares and Fillies and
Farm Stock and Implements,

the property of

W. G. HOWDEN, Columbus P. O., Ont.
3 miles from Myrtle Station, on the C. P. R., on

Wednesday, March 22, '05

Bulls including the Imp. stock bull Meadow Lord of the
Kilblean Beauty family.

Trains will be met at Myrtle station on the C. P. R.
and G. T. R. evening before and morning of sale. Cata-
logues mailed on application.

W. G. HOWDEN, Columbus, Ont.

On Thursday, March 23rd, Mr. Geo. H. Johnston, Balsam,
Ont., near Claremont, C. P. R., will sell his entire herd of
Scotch and Scotch-Topped Shorthorns at auction.

Auctioneers | **LEVI FAIRBANKS**, Whitby.
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**Scotch
Shorthorn Cattle**

WORK HORSES, FARM STOCK
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THE PROPERTY OF

GEO. H. JOHNSTON, Balsam P. O., Ontario,
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Thursday, March 23, '05

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9 particularly good young bulls, including the imported
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evening before and morning of sale. Catalogues sent
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GEO. H. JOHNSTON, Balsam, Ont.

On Wednesday, March 22nd, Mr. W. G. Howden, Columbus, Ont.,
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Scotch and Scotch-Topped Shorthorns by auction.

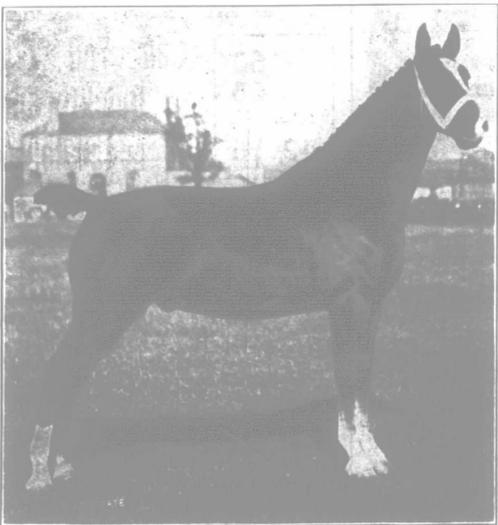
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GREAT DISPERSION SALE

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50 High-class Registered Hackneys 50

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As well as some excellent **Harness and
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Clydesdale Stallion**, will be sold at
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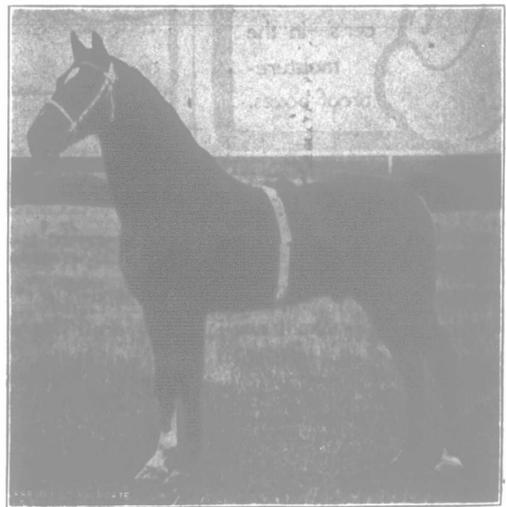
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Consisting of the entire stud (without re-
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Terms: Cash. Special arrangements
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For further particulars, see Gossip.



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Bowmanville Station is on the main line of the G. T. R. (40 miles east of Toronto); 5 trains each way daily.

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Write for particulars.

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IF YOU WANT TO
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DUNDAS AXE WORKS
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You want to insist on getting the Crown Jewel Axe from your dealer. It will not cost you more than any other good axe, but will give you the best satisfaction. We have letters from all over the country, speaking of it in the highest terms. If you cannot get it from your dealer, let us know. We have other lines of axes, and are always glad to send our booklet telling about them to all who ask for it.

The Dundas Axe Works
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"Crown Ups" have no monopoly on

**Mooney's
Perfection
Cream Sodas**

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FOR SALE

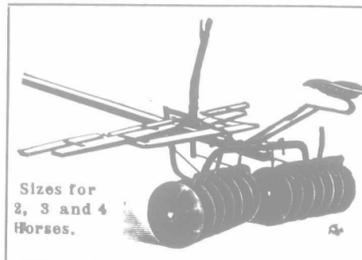
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CADWELL, JORDAN & HUNT,
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Rods rolled from steel billets of peculiar grade and temper, best for the purpose known. Are by cold process drawn to wire, well-coated against the weather. Then converted to a continuous perfect spring from end to end. This is London Spring Steel Wire made—its coiled, not kinked, By a process not possible in ready woven fencing. A in tag, stamped with makers' initials, is threaded on inside end of every genuine bundle. **London Fence Machine Co., Limited, London and Cleveland.** West Agents—A. E. Hinds & Co., Winnipeg. Que. and East Ont.—Phelos & Smith, Montreal. Maritime Agent—J. W. Boulter, Summerside, P. E. I.

The BISSELL DISK HARROW is Properly Balanced



Sizes for
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Horses.

Stays down to its work—splendid feature, this. Other styles and makes are imperfect; the others buckle; they bind; they hump up in the center; they jolt the driver in the seat; they draw heavy; they are a burden on both man and team. The Bissell Disk runs free—is light draught—is easy on driver and easy on horses—has the essential parts all in the right relation.

Read about the Bissell Disk Harrow—it has a successful record.

None genuine without the name "BISSELL."

Send us your address on a postal card; we will cheerfully give you further information.

Manufactured by
T. E. BISSELL, Elora, Ont.
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Is as Good as a Hired Man

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SAVES YOUR MUSCLES, TIME, MONEY.

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The Farmer's Advocate

and Home Magazine.

"PERSEVERE AND SUCCEED."

ESTABLISHED 1866.

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VOL. XL.

LONDON, ONT., AND WINNIPEG, MAN., MARCH 9, 1905.

No. 650

EDITORIAL.

Back to the Soil.

There existed a time, even within the memory of many of us, when the denizens of city and town almost invariably looked upon those of the country with a sort of compassion. Farmers, forsooth! Poor souls, doomed by fate or incapacity for business to spend their days in grubbing a living from the soil! Hump-backed were they from hard work, and behind the times, their livery rusty, ill-fitting clothes, dirty teeth and finger nails, and a provincial "brogue," in which the omission of the final "g" of "ing" was the leading feature. So, the farmers were looked down upon as a class, and their occupation belittled, because of the carelessness of the few, and the dry-goods clerks and bank-boys smiled and shrugged their shoulders, and thanked their stars that they were not as one of these. But the sturdy old "hayseed" or "mossback," driving in on his load of hay, recked not at all, but kept his rugged country heart staunch within him, and felt glad and peaceful when he got back home at night to his cows and horses, the dog watching at the gate, and the neighbor ready to drop in to have a talk over the prices after tea. And so the ebb of misconception was reached, and it became time for the tide to turn.

Turn it did. Little by little, it came to be recognized that the "mossback" was making money; that up-to-date machinery was making his work easier for him; that he was beginning to build attractive houses and barns worth seeing; that, in short, he wasn't having such a bad time of it at all, and that the farmhouse, with its gallons of Jersey cream, and its eggs fresh from the straw, wasn't a half-bad place to spend a summer holiday in. By-and-bye, too, it began to filter into the minds of these benighted ones among the town-folk, that there must be something in farming, else why this fuss over agricultural education, agricultural colleges, etc.? Why this ceaseless probing into farmers' affairs by the Government? Why this turning to farming of men who might live wholly in another world, literary lights, such as Haggard and Buchanan, in England, and others; merchant princes and industrial magnates all over America? It was noted, too, that the farmers' sons and daughters were coming into the towns to the high schools and collegiates, and were carrying off not a mean percentage of the honors. More wonderful than all, was it observed that many of these educated farmers were returning, of their own free will, "to the land," where they were managing to become people of "affairs." Surely, then, there must be some use for brains in the country.

So the faint call became clearer, and the country became the fashion. Over desk and counter began to creep visions of the free, independent, open-air life; nature-books appeared, not as heralds of the new ways of thinking, but as signs of the times, and the bookstores became flooded with them. Finally, a few venturesome souls from the shops and desks began to creep back to the land. The movement has not yet been fully established, but it is in progress, more noticeably as yet, perhaps, in the United States than here. It is even stated that, in some parts of the former, a fair percentage of the students in the agricultural schools are from the city. This change may go on with profit both to town and country, for the town has many to spare, and in the country are yet millions of acres waiting for the touch that shall turn the prairie grass and the

deep, wild woods to fields of gold. For the present, however, to the country lad, it is sufficient to know that the stigma has passed forever from the name of the farm; that he may be proud of his heritage, and of the good old name of "farmer"; and that it will be wholly his own fault if the term "hayseed" or "mossback" is ever applied to him more.

Preparing for Seeding.

The importance of sowing only clean, sound seed is being more generally recognized by farmers, and cannot be too strongly emphasized if noxious weeds are to be kept in check and paying crops obtained. Experiments have proven that the largest, plumpest seeds of grain, as a rule, yield much the largest crops. The grain and grass seed sown earliest in the spring, provided the land is in suitable condition, generally makes the strongest and most continuous growth, and yields the largest returns. It is, therefore, important that sufficient good, clean seed be provided and prepared now, before the rush of spring work comes. The prudent farmer will have his plans and calculations for seeding well considered and matured early in this month. He will see to it that his horses, harness and implements are all in good condition before seeding time, in order that the work may be pushed through as quickly as possible, and that the cultivation will be such as will give crops the best chance to start well and to develop satisfactorily, and will not slight the work in the vain ambition to finish before his neighbors. No work on the farm pays better than properly preparing the seed-bed, thoroughly breaking up and pulverizing the surface soil so that germination of the seed may be quickly effected, and that the rootlets of the plants may readily find available nourishment to give them a good start in life. We are not unmindful of the fact that soils and circumstances differ so widely that no cast-iron rules can be laid down that can be safely followed by all, and that each farmer must use his own judgment, and profit by his experience in handling the land he has to do with, but, as a general rule, fall-plowed land in preparation for spring seeding needs only surface tillage with cultivator, disk and smoothing harrows, and, if need be, with the roller, to pulverize lumps or flakes which the other implements fail to break up. As to the depth to which it is necessary or prudent to cultivate there exists a difference of opinion, some claiming that for best results, cultivation should be only to the depth at which the seed is required to be deposited, that the seed, being placed on firm, moist soil at a depth of two or three inches, and covered with as many inches of loose, dry earth, has the benefit of mulch, which prevents evaporation of moisture, allows the air to reach the seed, and gives a warm, dry surface for the sun to warm, hastening the germination of the seed, and insuring exemption from drouth, even though no rain may fall for weeks. Others contend for, and practice, deeper cultivation, claiming that a deep seed-bed is necessary, in order that the roots, in their search for food, may have free access to loose soil in all directions. These differences of opinion may, in part, be accounted for by the differing character of the soil their advocates have been dealing with. One can readily understand that on loam or low-lying land, the shallow cultivation indicated may be sufficient, and best, while on clay knolls deficient of humus, or vegetable matter, and hence liable to dry out and bake, deeper cultivation is desirable and safer, unless such portions are mulched by means of a light

top-dressing of short barn-yard manure to encourage and preserve moisture. The columns of the "Farmer's Advocate" are open for the discussion of these and other methods of cultivation, as well as the question of varieties of grain and grass seeds, their preparation, and the quantity per acre necessary to be sown for best results, the best class of implements of cultivation, the place and potency of the roller, before or after sowing, and the use of the harrow on crops after germination, where the surface soil has become packed by rains and baked or crusted by sun and wind. Farmers, let us hear from you on these points in short letters, giving your opinion and experience along these lines. If you have not had experience in writing for the press, do not allow that to deter you from writing. We will see that your contribution is put in presentable shape, and shall be thankful for your interest and help. We consider the letters from farmers the most interesting feature of our paper, and we have reason to believe most of our readers are of the same opinion.

Canadians for Canada.

Men are indeed blind to the signs of the times who fail to discern the evidences of unprecedented agricultural activity and advancement in Canada. Concurrent with this great movement, country life, its occupations and advantages, have swung into more pronounced and general appreciation, not only on the part of farmers and their families, but of townsmen. Everywhere we find business men of means in cities and towns securing farm properties convenient of access, devoted to live-stock rearing of one kind or another, horticulture, and the like, and upon which they reside in the summer-time, and in many cases permanently. Not being in a position to undertake the actual direction themselves, these men require the services of farm superintendents or managers. There is also an increasing call for herdsmen on large pure-bred stock farms, and for managers on farms where such specialties as fruit-growing, poultry-rearing and dairying are being pursued. Young men of, say, twenty-five years old and upwards who have been brought up on such farms, and have then secured the special technical and business training which the Ontario Agricultural College affords, should be well adapted to assume such responsibilities. In addition to the foregoing qualifications, we have no hesitation in saying that the very FIRST ESSENTIAL looked for will be unimpeachable moral character and integrity, lacking which all else is vain. It is just this class of men that have been attracted to the agricultural college. Now, there must be a considerable percentage of O. A. C. students who have spent two or more years in taking its practical courses, and who, not having farms of their own to return to, or for other reasons, will desire to strike out on their own account. The president of the college and staff are not long in determining the measure of students, and would be in a position to see that none were recommended for such positions, unless they were reasonably well satisfied that they had the requisite capacity for the headwork and manual labor necessary to make whatever proposition they undertook go and pay. From what the "Farmer's Advocate" knows of the Agricultural College students, there has been plenty of just such material there, and we would very much prefer to see them remain in Canada, and aid in building up a splendid nationality here at this critical period in her history, than to go in search of employment to the neighboring republic or other foreign countries. These graduates have been,

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THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

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with few exceptions, reared on Canadian farms, and will most assuredly be in a position to give a good account of themselves in promoting the interest of those who entrust them with responsibilities, and, at the same time, lay the foundations for their own future.

To Assist in Controlling Weeds.

The question of weed destruction and control is the all but universal problem in Manitoba, and it helps nothing toward the mastery of the situation that grain-growing is the most popular branch of farming in this Province. Successive crops of spring-sown grains provide the most favorable opportunity for such weeds as wild oats, French weed, Canadian thistle, etc., to produce seed and to propagate themselves from year to year. The situation has become positively serious, and the public is open to any suggestion and will support any practical scheme that will assist in the war on these parasites of the grain field.

A hint as to the course to pursue comes from the State of Texas. Down there the U. S. Department of Agriculture is establishing demonstration farms, apart and distinct from experimental farms, for the purpose of demonstrating the system of farming it will pay best to pursue in that State. This idea applied to Manitoba would mean that the Government select certain farms throughout the Province to be used to illustrate what methods of cultivation and cropping would be most practical and profitable to follow, in order that the invasion of weeds might be checked and the minimum grown. These farms would not necessarily be owned by the Government, for there are plenty of such places throughout the Province where weeds are being controlled, but the detail work of each farm might be compiled by the Department, and a report issued weekly or fortnightly during spring, summer and fall.

HORSES.

Watch the Mare at Foaling Time.

(Continued.)

We, of course, assume that the mare is provided with a comfortable box stall of sufficient size. This should be thoroughly clean and well bedded, and if there be an absence of feed boxes, mangers, etc., all the better, as these are more or less in the way, and in some cases mares foal while standing, and there is a danger of the foal dropping into one of them.

If the mare show symptoms of nervousness on account of the presence of an attendant, he should remain out of sight as much as possible. If the act of parturition take place in a normal manner, he should not interfere, but if complications arise he should endeavor to correct the fault. It is not uncommon for the mare to lie down with her croop so close to the wall that delivery cannot take place. In such a case she must either be forced to rise or be shifted into a favorable position. If the labor pains have been frequent, severe and long for considerable time, and still no visible progress has been made towards delivery, the attendant should roll up his shirt sleeve, oil arm and hand well, and endeavor to ascertain the nature of the obstruction, whether it be malpresentation, nondilation of the os uteri, or other causes. If he has sufficient skill to rectify matters he should do so at once, and if not he should secure more skillful assistance as soon as possible, as ignorant or unskillful interference will, in all probability, complicate matters and render successful interference beyond reasonable hope.

In many cases, after more or less prolonged pains, an easy birth takes place, and it is not uncommon in such cases, where the membranes have not ruptured, for the foetus to be born enclosed in them, and unless immediately liberated will perish from suffocation. So soon as the circulation of the blood from the dam to the foetus ceases, the latter must breathe or perish.



J. W. Sheppard, Cayuga, Ont.

President Ontario Association of Fairs and Exhibitions.

and in this case it cannot breathe, because it is enclosed in a complete sac. Instinct is supposed to teach the mare to liberate the foetus, by tearing the membranes with her teeth, and this is sometimes done, but in the majority of cases she lies for a few minutes after delivery, and in the meantime the foetus suffocates. The attendant must cut the membranes, liberate the foetus, and attend to the umbilical (navel) cord. He should remove all mucus from the mouth, nostrils and eyes of the foetus, and if the dam is still inactive, he should rub it well with clothes or wisps of straw until it becomes dry. This rubbing, or the licking of the dam, when she will attend to it, stimulates circulation by the friction, while if the foal be left alone the circulation remains sluggish and respiration weak. In regard to the umbilical cord, if it remain unbroken during delivery it should be promptly attended to. Here instinct is again supposed to operate, and teach the dam to bite it off; but we find that extraneous aid is often necessary. The attendant should be prepared for such emergencies, by having at hand a knife and some strong soft cord. He should tie the cord tightly around the umbilical cord, about one inch below the abdomen, and cut it off with a scraping motion of the knife about an inch below that. He should also be provided with a bottle of the solution of corrosive sublimate, 1½ grams to the ounce of water, and should dress the navel with this as soon as possible, and four or five times daily until healed, in order to prevent the entrance of the germ that causes joint ill.

SUSPENDED ANIMATION.—In some cases the foetus, following either a rapid or prolonged birth, is apparently dead, but the activity of the circulation can be detected by placing the hand just behind the left elbow and feeling the beating of the heart. If respiration be not established quickly the little animal will

perish. Respiration, under normal conditions, is established by what is called a "reflex nervous action." The young creature is more or less suddenly ushered into the external air, which is usually much cooler than its former habitation; this acting upon the skin causes a gasping, which is continued by regular respirations. When this fails to act, it can be aided by slapping the foetus with cloths wrung out of cold water, or even throwing cold water upon the foetus, and by spreading and closing the fore legs of the animal, and by breathing into its nostrils or forcing air into them with a small bellows. Many foals perish from this cause, and at least a reasonable percentage of them could be saved by prompt and rational attention.

WEAKNESS OF THE OFFSPRING.—Many foals are so weak and helpless when born that even a few hours' inattention will prove fatal; while if they are attended to and assisted to their feet and held up until they get nourishment from the dam, in at most an hour after birth, and every half hour or so afterwards, until they gain sufficient strength to help themselves, they will do well. It usually requires two men to do this, and if the dam be restless, a third is needed to hold her.

VICIOUS DAMS.—Some mares, and especially those with their first foals, are so vicious with them that unless interfered with they will destroy them. This viciousness usually soon passes off, but close attention is required at first. In most cases all that is required is for an attendant to hold her with a bridle, and another attendant place the foal in position to suck. In other cases it is necessary to apply a twitch to the mare, or even tie one hind foot forward, to prevent her kicking. This should be done each time the foal wants nourishment, until the mare becomes reconciled. In the majority of cases the dam requires no particular attention, except to see that she is provided with a warm drink and warm feed of bran as soon as the foal has been attended to, but of course there are liable to be many conditions in which she will require special and skilled attention.

There may also arise in the foetus conditions not mentioned that require special attention, but we think we have shown that it is wise to keep a close watch on the mare that is about to fetch forth young.

"WHIP."

Canadian Horses for the British Army.

That Canadian horses are adapted to British military purposes we have satisfactory evidence in the decision of the British War Department to purchase five hundred horses annually from the Dominion. About four thousand new horses are required for this service every year, and, through the good offices of Mr. W. S. Spark, who toured Canada last year in the employ of the Agricultural Department at Ottawa, Canada will have an opportunity to supply one-eighth of the total number. Mr. Spark has been appointed to make the purchases and suggests the establishment by the Ontario Government of a remount station as a means of immediately securing the necessary remounts. He is also commissioned to ascertain for the British Government from what country could be secured 10,000 horses in the event of war, and Canadian horsemen will be pleased to learn that Mr. Spark considers Canada most favorably situated. After studying the conditions in the Argentine Republic last year, he declared against the horses of that country. Two classes of horses are required—one for cavalry purposes, of the stamp in use at Stanley Barracks; the other for the artillery, somewhat heavier, possessing an infusion of Shire or Clydesdale blood. Of the latter, about two hundred are now wanted.

The Functions of the Pastern.

The pastern, next in importance to the foot, should be oblique—sloping—and springy, viewed from the side. It is made up of the long or pastern bone, articulating at its upper end with the lower end of the cannon bone at the ankle or fetlock joint, the smaller pastern bone bearing on this at its upper end and below with the coffin-bone enclosed in the hoof, and should stand at an angle of 45 degrees with the ground surface of the foot. It is plain to be seen—and all experience bears unquestioned testimony—that this sloping of the pastern in conjunction with the cushion structure of the frog is the main dependence of the horse from all jars in movement and concussion of the joints of the feet and legs to prevent founder and navicular troubles. The pastern bones, as it were, are suspended in a mass of ligaments and tendons, and when placed at the proper angle greatly relieve the bones of the foot from severe concussion, irritation, and possible inflammation, as well as relieving the sensitive frog from injury by reason of such suspension at that angle. Ringbones, sidebones, and joint troubles are generally associated with straight pasterns. Horses with springy pasterns have more freedom of action in their legs, are better walkers, smoother trotters and pacers, and the springy pasterns are indispensable to the easy riding horse. The pasterns should be of medium length in draft horses, but this essential springing down of the pasterns at every step, or in pulling heavy loads, is of great importance in their lasting qualities or for breeding purposes. The straight-pasterned colt will come more so as

he advances in age and use. Straight pasterns bring the greater jar or concussion within the bones of the foot, and thereby have the greater effect on the coronary and navicular bony tissues.—[Farmer and Stock-breeder.

STOCK.

Feeding Value of Oat Hulls Compared with Oat Straw.

I have a bunch of steers feeding. They are not doing as well as they should; they seem dry in the hair. Have been recommended to give them sulphate of iron and arsenic. Would that be good; if so, what quantity should I give?

What is the feeding value of oat hulls?
ENQUIRER.

Regarding oat hulls, the feeding value of pure oat hulls is very little greater than that of oat straw. As a rule, however, oat hulls as bought on the market contain more or less of particles of the oat grain and floury particles, which add to the value of the food. As there is no constancy regarding proportion of these additional substances, it is impossible to make a really satisfactory estimate of the feeding value of commercial oat hulls. I presume, however, that your inquirer has reference to pure oat hulls, in which case they may be placed on about the same plane with oat straw or chaff.

Regarding bunch of steers, I may say it is unsafe to prescribe in a case of this kind, unless one were thoroughly familiar with all the circumstances and the symptoms evinced. Sulphate of iron is regarded as a tonic, and I presume that is why it has been recommended. Arsenic, also, has a special tonic effect, but is usually employed only in extreme cases, and I would not think it good practice to give it in a case of this kind. It would probably do no harm to use small quantities of sulphate of iron, but it is my opinion that substances of this kind should be given only under the direction of a qualified veterinarian, who has had an opportunity to examine the animals and the circumstances surrounding them. It looks very much to me as though the trouble had come from injudicious feeding. If the digestive organs are deranged through mistakes in feeding, the main effort will have to be towards correcting this difficulty. If your correspondent had described his method of feeding, it would have simplified the problem very much. Rather easily-digested foods should be employed. A liberal supply of roots, say 40 or 50 pounds a day to each steer, should be a help. This, with hay of good quality, or chaff, or even cut straw, should answer well for the bulky part of the ration. As to the meal ration, it would be well to restrict the quantity somewhat, and to be sure to have a meal that was somewhat light and bulky in character. If corn or barley constitute any considerable part of the ration, it would be well to mix some oats or even a little bran with the meal, in order to give it rather more bulk. A pound of meal per day per hundred pounds live weight of the animals may be counted a pretty heavy ration, and to start with steers are better to receive less than half this quantity. I think it would be good practice to feed sulphur to these steers, say three or four times a week, for several weeks, and then possibly once a week would answer. A tablespoonful at a feed makes a very fair allowance. Salt should also be provided, and the steers should also receive plenty of water.

Of course, these are only general recommendations, which are all that can be offered under the circumstances. I regret very much that a full statement of the method of feeding did not accompany the inquiry, as it is only under these conditions that a satisfactory answer can be made.
G. E. DAY,
Agricultural College, Guelph.

Will the Embargo "Go"?

With Mr. Chamberlain and Sir Henry Campbell-Bannerman pledged to join hands in securing the free imports of store cattle from Canada, and with a solid phalanx of Irish members on their side for the time being, they are not without hope that they will soon achieve the victory for which they have so long been fighting. Canada is, and has always been, absolutely free from all diseases which are scheduled as contagious, are the strongest arguments that can be adduced for the repeal of the Diseases of Animals Act. The reason why the Irish breeders have been so suddenly converted to the view that the British ports should be reopened to Canadian store stock, which would inevitably involve a heavy reduction in the price of store cattle, which is the principal export from Ireland, is said to be this: The Irish landholders are just now in the way of purchasing their holdings under the Irish Land Act, and by reducing the price of their principal product, namely, store cattle, they intend to purchase their farms at much lower prices than they could otherwise do. When they have attained this end they will very soon again apply the closure to the Canadian store stock importation trade, for the Irish members, by their solidarity and organization in Parliament, can usually hold the balance of power in any Government.—[North British Agriculturist.

Scale of Points of a Typical Galloway.

The following is the scale of points of a typical Galloway, as drawn up by the Board of Directors of the American Galloway Breeders' Association, December 2nd, 1904, which will be submitted for adoption thereof at the next annual meeting, 1905. This scale of points is based on the original scale of points drawn up by the Council of the Galloway Cattle Society of Great Britain, April 18th, 1883:

- Color.—Black, or black with a brownish tinge.
- Head.—Short and wide, forehead broad, crown wide and oval, not rising to a point. Any trace of scurs or horns debars an animal from registration. Face clean, muzzle broad, and nostrils large.
- Eye.—Large and prominent.
- Ear.—Moderate in length and broad, pointing forward and upward, with fringe of long hairs.
- Neck.—Short, clean, and filling into the shoulder in such a manner as to make the neck and shoulder of fleshy animals appear moulded as one piece. The top of the neck in line with the back in a female, and in a male gradually rising with age.
- Body.—Deep, wide, well rounded, moderate in length, and symmetrical.
- Shoulders.—Broad, but well laid into body, joining smoothly; compact and deeply fleshed on top.
- Ribs.—Deep and well sprung, crops deeply fleshed, making width of shoulders and body at ribs uniform.
- Hook-bones.—Not prominent, in fleshy animals not visible.
- Loin.—Moderate in length, wide and deeply fleshed.
- Hind Quarters.—Long, wide and well filled.
- Rump.—Straight, wide, carrying width of body out uniformly; well filled with flesh.
- Thighs.—Broad as viewed from side, thick as viewed from behind; straight and well let down at hock; rounded buttocks very objectionable.
- Legs.—Short and clean, with fine bone.
- Tail.—Straight and smoothly laid in with flesh at sides. A high tail-head very objectionable.
- Skin.—Mellow and moderate in thickness.
- Hair.—Soft and wavy, with mossy undercoat. Harsh or wiry hair is very objectionable. Curly hair, if soft, is not objectionable.

POINTS TO BE AVOIDED.

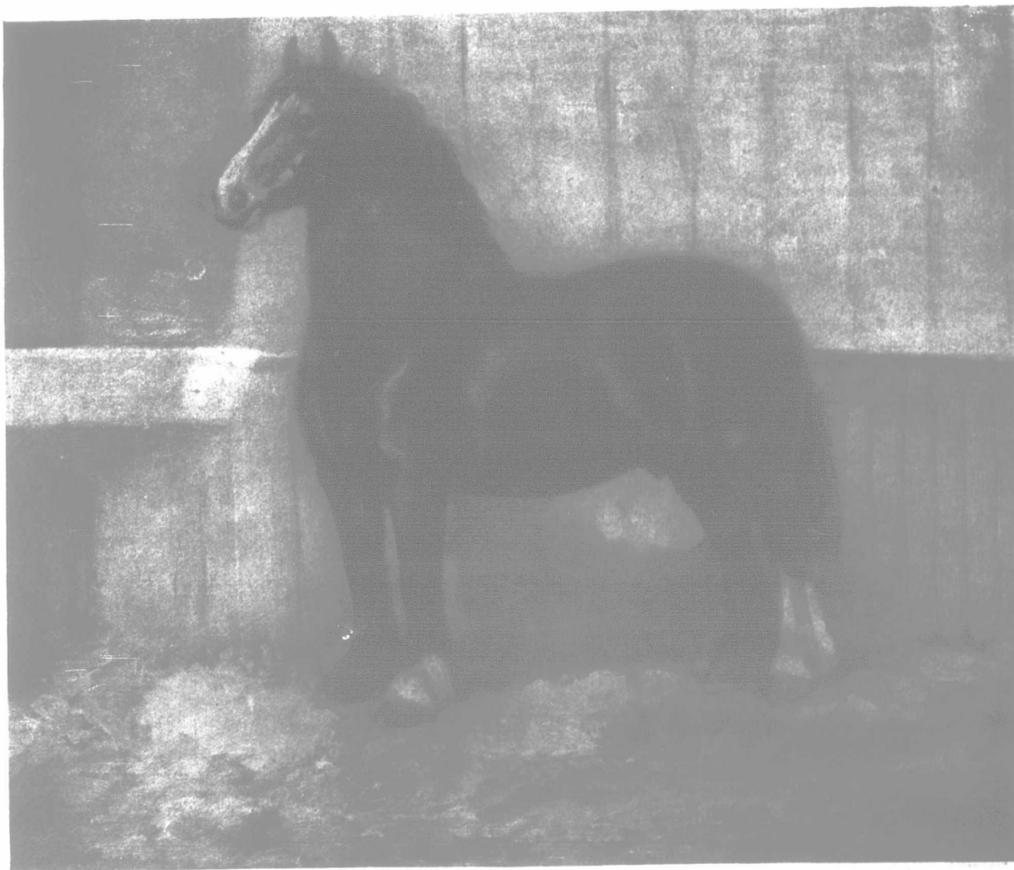
Mr. James Biggar, "The Grange," Dalbeattie.

Scotland, who was judge of fat classes at the 1902 International Live-stock Exposition, Chicago, prepared the following list of "Points To Be Avoided" for McCrae's History of Galloways twenty years ago. With very slight revision, they are as pertinent to-day as the day they were written.

- 1st—Long, narrow head, with light crown.
- 2nd—Narrow, tapering muzzle.
- 3rd—Long, drooping ears.
- 4th—Small, deep-set eyes.
- 5th—Small, light neck.
- 6th—Light, scraggy breast.
- 7th—High, narrow shoulders.
- 8th—Flatness behind shoulders.
- 9th—Light fore or back ribs.
- 10th—Square and prominent hook-bones.
- 11th—High or drooping rumps.
- 12th—Weak or slack loins.
- 13th—Rounded buttocks.
- 14th—Fleshy double thighs.
- 15th—Big, coarse bones.
- 16th—Thick, stiff skin.
- 17th—Hard, wiry hair without soft undercoat.

To Cure a Sucking Heifer.

A writer in one of our agricultural exchanges says: "As all dairymen know, there is probably no greater nuisance on a dairy farm than a cow or a heifer addicted to the habit of sucking herself and other animals in the herd. It is not only the loss of the milk that is sustained, but it would seem that one such animal would induce others to contract the habit. We have had our share of trouble with heifers sucking themselves and others of the dairy herd. The fact of our having trouble in this respect has perhaps been 'for the best,' since in endeavoring to cope with it we have finally been enabled to hit upon a very practical means of breaking the habit in every instance. The method is so simple and easy of application as to put in the shade a number of devices on the market, and what is better, it is entirely satisfactory. Proceed this way, and you will have fixed for good the most persistent sucker on the farm. Insert in the sucking heifer's nose an ordinary bull ring. Just before inserting the ring, slip on it two common iron harness rings—of course, the harness rings are to suspend loosely after the bull ring has been inserted. This is the trick of it. By adding more than one loose ring, the animal can in no way prevent them from dropping in the mouth when it attempts to suck. Brass bull rings can be purchased in almost any hardware store for twenty-five cents each, and the common iron harness rings cost but a few cents per dozen."



Clydesdale Stallion.

Representative of the horses in the stables of Messrs. Alex. Galbraith & Son, at Janesville, Wis., and Brandon, Man.

Cost of Producing Beef.

To the Editor "Farmer's Advocate":

There have been two statements in your valuable paper about the cost of feeding cattle from one year old to four. Mr. Wing says it costs three cents per pound to raise an animal the first year, seven cents the second year, eleven cents the third year, and seventeen cents the fourth year. Prof. J. H. Grisdale says it costs two cents per pound for the first six months; for the second six months, five cents per pound; one to two years, eight cents per pound; and from two to three years, seventeen cents per pound. Now, I have been feeding steers from two years to four years old for over thirty years, and my experience is that three-year-old cattle can be fed at a cost of from seven to eight cents per pound, instead of seventeen cents per pound. Our experience is that a thousand-pound steer can be made to weigh thirteen hundred pounds with six months' feeding, at a cost of from \$20.00 to \$24.00. I might say I fed twenty of these steers last year; their average gain was 301 pounds each. To confirm what I have written, look up the report given by Mr. Simpson Rennie, in the Ontario Live-stock Associations' report of 1903, page 75. This is a statement by a man who has gained his knowledge by experience, not by college learning or book-farming.

Now, it is strange that the Government should have such men trying to teach the farmers of this Province what it costs to feed a three-year-old steer, when they seem to know nothing about what it costs themselves. I hope, Mr. Editor, we will have a good discussion on this subject, and that Prof. Grisdale will explain, through the "Farmer's Advocate," how it costs seventeen cents per pound to finish a three-year-old steer.

York Co., Ont. JOHN KENNEDY.

[NOTE.—In all these calculations, a great deal depends on the valuation put upon the feed, and a good deal also upon the skill of the herdsman. We have every reason to believe Mr. Wing's and Prof. Grisdale's figures are based upon authentic experimentation, though it does not by any means follow that beef cannot be produced for less. The main point, however, is that the figures are probably relative. That is, if the estimated cost of producing a pound of gain on the older steers is too high, the cost per pound in the case of the young ones will be likewise excessive. In any case, the economy of good feeding and early maturity is unquestionable. In Mr. Rennie's calculations, as quoted in the Live-stock Association report referred to, the values (which, of course, are necessarily arbitrary) put upon roots and meal are quite low, the former figuring out to \$1.67 per ton. Whether they can be profitably produced for this, Mr. Rennie does not prove. All these feeding problems dovetail into the important one of crop production in such a way as to make it well-nigh impossible to separate them satisfactorily. Assumed valuation must, therefore, be placed upon feeds, and the intelligent farmer, understanding this fact, should not be in haste to dispute calculations on the cost of meat production. We have heard Duncan Anderson state that, in figuring the cost of feeding steers, he threw in the oat straw, as it was worth more in the manure pile than in the straw-mow. This does not strike us as being quite right, inasmuch as these by-products have value for feeding to other stock, and therefore should be rated at their actual worth for substituting hay or silage. It is easy enough to figure a handsome profit in feeding. To actually secure it without losing on the other end, viz., production of the feed, is another matter. The problem, though, is one well worth figuring upon, and we append Mr. Rennie's statement:

"In selecting a ration, we require one that will fatten an animal readily and give good profit. If an animal weighing about a thousand pounds is brought in, and is kept tied up and quiet, the following ration will be about right: 12 pounds clover hay, 30 pounds roots, 2 pounds peas, 1 pound barley, 2 pounds corn, 2 pounds oats, and 1 pound linseed meal. I find that a ration of eight pounds will do such a steer through the feeding period; but I do not give any meal for a little time after they are put in the stable. When they are on the full ration they get more than eight pounds per day.

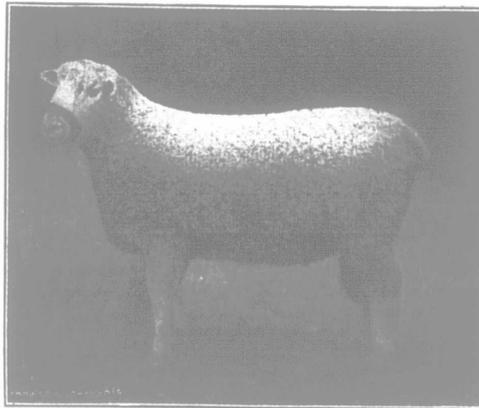
"The main point to consider is the profit. Take an animal weighing 1,000 pounds, and costing \$35, or 3½c. per pound, which is low; the cost of feeding that animal for six months on the ration I have given will be \$24.52. In making this calculation I have valued the hay at \$5 per ton, the roots at 5 cents per bushel, the meal at 1 cent per pound. On this basis the cost will be 15½ cents per day, or \$24.52 in six months. I do not usually feed for quite six months, but if we can show a profit on feeding this animal for six months, we should be satisfied. The interest on the investment would be another dollar, so that you will have to get for your animal \$60.52 when finished. A reasonable gain for a 1,000-pound steer would be 300 pounds; we should expect that—in fact, I often get a good deal more; but an ordinary feeder on a fair ration should have a gain of 300 pounds. The animal would

then weigh 1,300 pounds, and you should get \$1.50 more a hundred than you buy them in at, or instead of 3½ cents per pound, you should get 5 cents. At 5 cents per pound you would realize \$65, or a clear gain of \$4.48."

Q.—What would be the value of the manure?
Mr. Rennie.—"That is too often lost sight of. Many, unless they see a great deal of gain in dollars and cents, are not satisfied, and would rather take their grain to market. I have figured out the commercial value of the manure, provided it is properly saved. The value would be as follows: Clover hay, 12½ pounds per day, equal to 2,250 pounds for six months, \$8.04; turnips, 5,400 pounds, \$2.40; peas, 360 pounds, \$1.63; barley, 180 pounds, 42c.; corn, 360 pounds, 88c.; oats, 360 pounds, \$1.12; linseed meal, \$1.50. On this basis, the commercial value of the by-product, after feeding an animal for six months, would amount to \$16.35. I calculate, therefore, that a person feeding as I have outlined would make at least \$10.00 per head from the manure, and still allow an ample amount for labor."

Dartmoor Sheep.

The Dartmoor sheep of the present day are a large, long-wooled variety, rivalling in size the Cotswold, Lincoln or Romney Marsh breeds. They are the result of crossing the original Dartmoor sheep with Leicesters and Lincolns, and do not give the idea of a forest or mountain race. They must, indeed, be very different from the "wild Dartmoor sheep" or "ugly old Dartmoors" of



Dartmoor Shearling Ram.

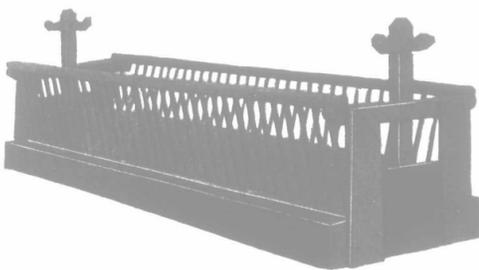
First prize, Royal Show, England, 1901.]

which Youatt wrote. Allowing for the influences of show-yard training, one can only now regard the Dartmoors, as seen at the leading English shows, as one of the heavy, long-wooled, hornless, white-faced races of sheep, with such an amount of the old nature as suffices to inure them to the severe winters of their native home, the highlands of Westmoreland. There were six entries of Dartmoors by three exhibitors, all from Devonshire, at the Royal Show at Park Royal, London, in 1904.

A Good Sheep Rack.

To the Editor "Farmer's Advocate":

In reply to your correspondent J. C., in January 26th issue, page 140 of the "Farmer's Advocate," re sheep rack, I herewith send you a photo of a rack I have been using for the last twenty-five years, and it is apparently as good to-day as when first made. It may not be the best rack in the world, but I like it the best of any I have ever seen, and I have seen a good many. I will give its dimensions: Length, 12 ft.; width, 3 ft. 6 in. (inside measure); height of sides, 10



Simeon Shaver's Sheep Rack.

in.; uprights at each end, 4 ft. long and 2½x4 in.; lower crosspieces on uprights, 3 ft. 6 in. by 2½x4 in.; upper crosspieces on uprights, 16 in. by 2½x4 in. The crosspieces should be bolted to uprights. The floor of rack should be down 3 in. below the top of the sides, and should be well supported and braced from below. The dividing boards in center of rack on top of floor should be 16 in. wide, and fitted so as to spread about 11 in.

at the bottom and to a point at the top. The upper and lower pieces of the rack proper are made of 3 in. square spruce, with the corners taken off. The rungs should be 4 ft. 4 in. long, and 4½ in. apart from center to center. The last rung at each end should be about 2 in. from end of lower pieces, and 4 or 5 in. on top pieces, which is to rest on the crosspieces attached to the uprights at ends of rack. There should be small notches or gauges on crosspieces next to the uprights to hold the rack when closed; also on ends, to hold open while feeding.

The photo shows the rack opened ready to receive the feed. When the rack is closed in the inside notches without feed in, it should just touch the floor. The upper crosspieces are to hang the racks on while being cleaned. The uprights and crosspieces should be made of good tough timber (mine is made of good ash). It is better to nail short pieces of boards up and down outside, as shown in cut, to support each end of long arms.

If you want to feed grain or roots in the racks hang the racks outside in outside notches, and the sheep cannot bother you.

With this rack there is no pushing the wool off the necks of the sheep reaching for the feed, and very little waste of feed, as the rack when closed leans in at the top, and there is a trough at the bottom to catch all leaves and fine stuff while the sheep are feeding.

Stormont Co., Ont.

SIMEON SHAVER.

Shorthorn Breeders in Manitoba Discuss Breed Problems.

The Shorthorn breeders of Manitoba met in Winnipeg during the week of the live-stock associations' meetings, at the call of E. R. James, director representing Shorthorns in the Cattle-breeders' Association, to discuss the subjects mentioned in his letter, which was published in the issue of February 22nd. There were present between fifty and sixty breeders of the reds, whites and roans, the following Shorthorn enthusiasts being noticed: J. G. Barron, Stephen Benson, R. C. Henders, Wm. Ryan, S. English, W. S. Lister, Walter James, Jno. Graham, Andrew Graham, A. Morrison, Jas. Yule, G. H. Greig, R. I. Crisp, Dr. J. G. Rutherford, Less Ferguson, A. Ayearst, Jno. Rankin, Jno. Gordon, Waldo Greenway, and many others, including many new beginners in the breeding of Shorthorns.

The discussions were animated, especially with reference to the apportionment of grants to shows by the Dominion Shorthorn directorate. Much light was thrown on the subject by President J. G. Barron of the Cattle-breeders' Association, who stated that he endeavored to get a share of the grant for Brandon Show, and that the election of members to the executive of the D. S. H. B. A. was cut and dried, and he and the other director from Manitoba had no voice in the election. Mr. Benson thought that if Brandon was to have a share of the grant, Neepawa and Killarney were equally entitled to such. Some of those present desired the formation of a Provincial Shorthorn Association, which the majority thought unnecessary at present in view of the resolution which was passed unanimously re nationalizing the records of Shorthorns as follows:

"Resolved that in the opinion of this meeting of Shorthorn breeders of Manitoba, it is absolutely essential to the future welfare of the interests of the breed in Canada that the Dominion Shorthorn Breeders' Association should be nationalized, and that the head office be moved to Ottawa.

"And further, be it resolved that if the controlling body of that Association refuse to nationalize the Shorthorn records, that a meeting be convened at the earliest possible date, of representatives of Shorthorn breeders of the Northwest Territories, British Columbia, and Manitoba, with a view to organizing a national Shorthorn Herdbook, under the provisions of the Act governing live-stock records."

Another important resolution passed by the meeting was introduced by Dr. A. G. Hopkins, and seconded by A. Graham, of Pomeroy, and was as follows:

"Whereas it is yearly becoming increasingly evident that top bulls of the Shorthorn breed are getting harder to get; and

"Whereas the competition of such opulent buyers as the Argentine men and titled Englishmen still further limits the choice of high-class bulls in Great Britain by Canadians wishing to introduce fresh blood; and

"Whereas many of the best British Shorthorns to-day, including many prizewinners, both male and female, are ineligible under our herdbook restrictions to be used in Canadian herds; and

"Whereas all students of the laws of breeding of improved live stock are of one opinion, viz., that it is not wise to narrow the stream of improved blood;

"Therefore, be it resolved that we, the Shorthorn Breeders of Manitoba, respectfully suggest to and urge upon the Dominion Shorthorn Breeders' Association that they remove the pres-

The upper side of 3 in. The rungs from center to center should be about 12 in. on top and 10 in. on bottom. The uprights should be small enough to hold open the door.

to receive the wool off the sheep. The side notches should be made in the floor. The while being made (dashed). It and down end of long the racks and the sheep

wool off the sheep. The side notches should be made in the floor. The while being made (dashed). It and down end of long the racks and the sheep

Shaver.

oba met in stock association. R. James, the Cattle-objects mentioned in the present beds, whites enthusiasts Benson, R. S. Lister, Graham, A. I. Crisp, A. Ayeerst, Conway, and beginners in

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Shorthorns both male herdbook ds; and of breeding nion, viz. am of im-

the Short- ly suggest Shorthorn e the pres-

ent barrier against some of the best British Shorthorns, and make easier the improvement of our Canadian Shorthorn herds by changing the requirements of the rule that all British Shorthorns shall trace to Vol. 20 Coates', to read Vol. 30 Coates', and that five or ten years hence the mark shall be Volume 35 or 40 Coates', and so on, similarly at set periods, depending whether a quinquennial or decennial period be decided upon."

FARM.

Farmers' Institute Cleanings.

Supplementary meetings for Ontario were held in several districts during February, the regular meetings, contrary to the usual custom, coming on later. In East Middlesex there have been eight supplementary meetings held. The delegation, consisting of J. W. Clark, Cainsville; A. C. Hallman, Breslau, and A. B. McDonald, Appin, report that while they have seen meetings more largely attended, yet on the whole attendance has been good, and interest in the subjects and discussion following addresses is quite up to the mark of any former period.

A few years ago, and for many years in succession, no subject was so much asked for as the silo. For some years back the bacon hog had the lead; so much so that an institute speaker, in criticism of a certain meeting, said that there they didn't care to talk about anything but hogs. This season these gentlemen report that while the silo and the bacon hog are still live subjects, there are others which excite greater interest. These are, "Improvement and Feeding of Stock," "Noxious Weeds," "Growing and Curing of Alfalfa," and possibly "Poultry."

CALF REARING.

Mr. Hallman, in his treatment of the stock question, lays special emphasis on the raising of calves. He claims that skim-milk calves are not necessarily inferior to those fed whole milk. His calves, after they are four or five weeks old, get skim milk only, and that by measure. Five or six quarts each per day, in three feeds for a time, and never more than eight quarts a day. He supplements with bran, fed dry, after a time adding grain—hay, of course, being supplied throughout. He made the statement that improvement in stock-breeding is of little or no account unless accompanied by improvement in feeding. He believes that dairy cows generally are not fed nearly up to their capacity, and, in consequence, do not return full profits.

ALFALFA.

Mr. Clark said that in his neighborhood alfalfa was so much thought of that some farmers were turning to it in preference to corn and the silo. He grew no other kind of hay, cut it three times in the season, and all kinds of stock were fond of it. He had with him a sample of the hay ground fine, for which he had a contract with some supply house, who sold it for poultry food. It looked like tobacco dust, such as greenhouse men burn to rid their plants of lice, and which is said to be excellent, dusted in the feathers, for lice in poultry, but smelt sweeter. The principal lack in the ordinary management of poultry in winter was said to be that of grit, and of meat in their food ration.

MIXED AND MUDDLED.

At the Stormont and Russell meetings, Mr. C. W. Nash is reported to have said that in some districts farmers had better cattle 25 years ago than to-day. In the early days Shorthorn sires were used on the native stock, then came the dairy era, and the Ayrshire was introduced to increase the milk flow; with co-operative dairying, the Babcock test system of paying for milk, and buttermaking, Jersey bulls came to the front, and then the impressive Holstein, so the combined result was described as "the worst mongrel on earth." Mr. Nash advocated using a sire for two generations, in other words, inbreeding, a doctrine which farmers will do well to consider long before adopting.

Mr. D. M. Wilson (Dairy Instructor) condemned turnips, apples and rape for milch cows, and advised cooling cheese-factory milk during week days to 60 and 65 degrees, and on Saturday night and Sunday morning to 58 degrees. He thought cheesemakers could not do the business just making cheese at one cent per pound.

POTATO BLIGHT.

In further addresses, which were practically the same at all points where Institute meetings were held in Eastern Ontario, the subjects of potato blight, warbles in cattle, insect pests, etc., were discussed.

Regarding potato blight, Mr. Nash insisted that spraying with Bordeaux mixture should be done when the plants are very young, just two or three inches high, and that it should be repeated about three times during the season. These precautions are essential to success with potatoes, as Mr. Nash was of the opinion that there is no blight-proof variety, and that only insistent care can secure a good crop. Where the soil is particularly rich in plant food the blight is likely to be worse, owing to the fact that the plants make such rapid growth at first. Spraying just as soon as the plants appear is, he said, useful in preventing injury from bugs as well as blight. Scabby potatoes might be prevented by sprinkling the potato chips before they were planted with flour of sulphur.

As regards smut in oats, Mr. Nash said that it could be prevented by wetting the seed thoroughly with

a solution made by dissolving four ounces of formalin in ten gallons of water; this quantity being enough for twelve bushels. The grain should be spread out and sprinkled wet with the mixture; kept so for two or three hours, then sown.

WARBLES.

Warbles in cattle, the speaker held, are becoming an evil very hard to remedy, but remedy is very necessary, since the insects retard the fattening of cattle greatly, and lessen the value of the hides. About the most practical way of getting rid of them is to squeeze them out. If every farmer would do this the country might soon be clear of warbles. Farmers should also put forth every effort to prevent destruction of birds, even hawks and owls, as the birds are our great protectors against insect pests.

BETTER SEEDS.

At the South Brant Institute meetings, Mr. Hutton dwelt on the necessity of buying only the very best quality of grass seed. Out of 523 samples of timothy tested last year, every sample contained from 100 to 1,200 weed seeds of various kinds per pound. Red and alsike clovers showed the same proportion. Only the best and plumpest seed of any kind of grain should be planted. In corn, for instance, a difference of six or seven bushels per acre may be obtained by putting in well-developed rather than shrunken seed.

Mr. Metcalf emphasized the importance of growing clover as a fertilizer, and Mr. Hilborn urged farmers to improve their home surroundings. By planting a few trees and shrubs each year, much may be done. Trees should be grown around buildings, as often in case of

followed by wheat seeded to clover. Twitch grass might be disposed of by plowing well in the fall, and cultivating and ridging the land up for winter. Cultivation is also effectual against bindweed, and most other weeds. Good drainage also is of great importance.

In speaking on "Dairying," Mr. James recommended the use of the scale to test the cows, and so facilitate the weeding out of poor ones. A balanced ration for cows is advisable, alfalfa hay being particularly valuable, owing to its balance of composition. Dehorning may be easily done, by applying Gillett's lye or caustic potash to the embryo horn when the calf is three to ten days old.

Mr. Thompson spoke on the "Feeding and Breeding of Swine," and recommended farmers to keep the right type of rangy bacon hog. He grew his hogs on roots and apples, fed meal dry, and gave water in the trough once a day. In pens he would recommend the "upstairs" platform for the hogs to sleep on.

PAINT THE BUILDINGS.

In North Brant the meetings began at Mulligan's schoolhouse, where Major Sheppard, of Queenston, and Mr. J. S. Pearce, of London, were the speakers. Major Sheppard said he was ashamed of the appearance of Ontario farm buildings. In the Maritime Provinces, and even in Quebec, the farmers generally either painted their buildings or washed them with some preparation that gave them a clean appearance, and acted as a good preservative to the outside building material. . . In regard to the improvement of country roads, he would adopt a system of road-building to do away with statute labor, and engage a commissioner who

knew his business, to look after the keeping of the roads in good condition. He would also compel by by-law, the use of wide tires on wagons.

Mr. Pearce spoke on the selection of seeds. Seed should be cleaned thoroughly two or three times through a good mill to rid it of everything but the largest, heaviest seeds. He advised hand-picking a few of the best heads of grain in a field, sowing this in a plot by itself, and repeating the operation to note results. By proper care the amount of yield could be increased five to ten bushels per acre. Only the best grass seed should be bought. Corn should be selected true to type, and tested before being planted. Farmers, he thought, should grow their own mangel and turnip seed from perfect roots.

SUGAR-BEET GROWING.

At Cainsville, Mr. Lampkin, in speaking on the culture of sugar beets, advised the liberal use of seed—18 pounds to the acre. He would not manure just before planting, but in fall before, or for a previous crop. Deep and thorough cultivation, a little further from the roots each time, is very beneficial. Thinning should be done when the third and fourth leaves appear. With good care a profit of \$30 per acre should be realized from sugar beets.

ORCHARD SPRAYING.

The travelling deputation, consisting of Mr. H. Jones, of Maitland, Grenville Co., and Mr. Mason, of Essex Co., encountered very stormy weather at Thornbury, Grey Co., and attendance was small. Mr. Jones spoke on "How to Manage Orchards." Heavy clay soil, he stated, is not good for an apple orchard, but clay soil, which is porous or well drained, is all right, provided it has a good amount of humus. Clay soil should be underdrained. As to situation, a gentle slope is usually best. Clean cultivation, following a cover crop of clover, is very satisfactory in an orchard. Barnyard manure is the best fertilizer, but if it cannot be spared, then wood ashes or artificial fertilizer may be applied instead. The first spraying should be done just when the first buds are bursting; the purpose at this stage being to combat the tent caterpillar and the bud moth. The second, to destroy the codling moth, should be given as soon as the blossoms fall. Two or three later sprayings will be beneficial against apple spot. When pruning, one should not cut the lower limbs off, and have all the fruit grow on top of the



Laura [112].
First-prize Shire mare in aged class and champion mare of the class, Canadian Clyde and Shire Show, Feb. 1905. Owned and exhibited by John Gardhouse & Sons, Highfield, Ont.

fire one building has been saved by trees growing between it and the one burning.

ORCHARD CARE.

At Ohsweken, Mr. Hilborn spoke on the "Care of Apple Orchards." Heavy clay land should be tile-drained and plowed in the fall when preparing it for an orchard. Trees should be set in rows, 30 ft. one way and 40 the other, the best quality of fruit being obtained by keeping the orchard in sod and letting the pigs run in it. A mulch of coarse manure should be put under the trees. Pruning should not be done before the 20th of February, and a tree should not be too severely pruned at one time.

Mr. F. Lewis, in speaking on "Raising Dairy Calves," said that the first thing of importance is that the calf shall be well born. A calf should always be left with the cow for the first few days. After being taken away it should be fed whole milk until it commences to eat other food, such as bran or oats, and then changed off gradually to skim milk, with a little oil meal and whatever grain, etc., it will clean up. It is very necessary that young animals be kept growing and in good flesh all the time.

WEED KILLING.

At Kirkton, Mr. R. Thompson, St. Catharines, and Mr. D. James, of Langstaff, were the speakers. Mr. James took as his first subject "The Destruction of Weeds," and illustrated his theories by telling what he had accomplished on a farm. Unremitting watchfulness, he said, is the price of success. He strongly recommended a hoe crop, with thorough cultivation,

trees, where it will be hard to harvest. The nearer the ground the apples grow the better.

Mr. Mason spoke on "Corn Growing." He advised farmers to grow their own seed corn, and to save seed from the best of the first ears that ripen. Corn might be planted any time from the 15th to the 20th of May. In Essex Co. the favorite system is to mark the field off in squares with a planter, and plant the corn with a hand-planter in hills three feet eight inches apart each way, with about three stalks to the hill. This way of planting makes cultivation easy, as it can be done lengthwise, crosswise, and anglewise, with a horse hoe, thus ensuring clean cultivation, with a minimum amount of labor.

Treatment of Black Soil.

To the Editor "Farmer's Advocate":

Sir,—I have before me the remarkable experience of "Tiller," with his black soil of Wentworth Co., recorded in your February 9th issue. The description of his soil is very much like what I have in an old beaver meadow, which, before it was drained, was under water most of the year. While the black soil he describes is much like mine—which I would describe as peat chips—unlike his, mine is underlain with a blue clay subsoil, which holds the moisture well. In fact, I have an underground spring, which comes up through a crevice of rock about three feet below the surface of the ground, and only overflows in the spring and fall. In a dry time this soil dries out very badly, and would drift were it not kept down with a grass which, like his, is very hard to kill.

From the fact that muskrats have revelled in his subsoil (and, by the way, a few muskrats have always stayed around this spring of mine), I suspect it has been low swampy land, inclined to a quicksand bottom, which when drained would certainly become very dry. As weeds seem to grow—and "Tiller's" grain for a time grows well and then wilts—it strikes me that it is due quite largely to lack of moisture. The capillary action would be too slow for grain, while weeds, with more roots and deeper ones, could get on fairly well; then the plant food, when made available, would more or less drain into the open porous subsoil. We know that phosphoric acid is often hard to unlock, especially where lime is deficient, as it must necessarily be in such soils. To subdue the grass, I would plow very shallow in a dry time with a rolling coulter, and turn over pretty flat; then late in the season plow it a couple of inches deeper. To sweeten the soil and whip up its activities, liberal applications of salt and lime should help it.

However, if it would grow good grass at all, I should keep it seeded down, and only till it when I had to renew the grasses. Even then a good disking on the old sod would be better than plowing, and at the same time disk in the grass and clover seeds desired.

I have been successful with grain only once on my soil, although I have tried it three or four times. I subdued the grass one season with buckwheat, and afterwards seeded it down. My soil grows very good grass, but the tame grasses soon kill out on the very peaty soil.

T. G. RAYNOR.

Enniskillen Can Grow Sugar Beets.

In recent issues of the "Farmer's Advocate," we have been reading articles of interest from other districts about sugar beets, especially from the Berlin district. Now, we only think it is our turn to ask for a little space in the farmers' paper.

We have been growing beets for three years, and the interest seems to be growing each year. The first year being unfavorable is not worthy of special mention. In 1903, we had three acres that brought \$210.00. That encouraged us to put in twelve acres in 1904. Our results were not so large as some others, the circumstances not being so favorable. They were grown on oat stubble, without any preparation, the one-half not being plowed until spring. And as the soil is clay loam, it was quite lumpy and hard to work. The twelve acres, after paying for the seed and freight, brought \$628.28. I paid out for labor \$125.00, leaving a little more than \$500.00 off twelve acres. They seem to be easier to work every year. This year we harvested them the cheapest yet. We used a topper, a boy and one horse doing three acres a day, followed by the team and lifter, at the same rate, and after harrowing them they were picked in piles, ready for drawing to the station.

We are looking for better results this year, if the season is favorable, and have prepared forty acres that we intend to plant next year.

The farmers as a whole are showing more interest in beets in this locality than in any other season there will be more sowing done in 1905 and 1906 years.

Enniskillen Tp., Landdon, Ont.

The weekly issue of the "Farmer's Advocate" and Home Magazine" was received with the right direction, a step we farm people are very much in favor of.

Wentworth Co., Ont.

Treatment of Seed Grain for Smut.

Farmers who have suffered by smut in their grain fields, particularly those who will be obliged to sow, this spring, seed from a smutty crop, would do well to consider the merits of formalin as a fungicide. Of all prescribed remedies for smut, it seems the best. Formerly, the immersion of seed in hot water was advised, then the copper-sulphate (bluestone) solution was recommended. Both were good, and saved many dollars in some localities, but the formalin treatment seems to combine the virtues of cheapness, convenience and effectiveness, better than either of the others, and experiments of the last few years seem to warrant its general employment as a preventive in districts where smut is at all likely to affect the crop.

On this point, the experiments of Prof. Zavitz, of the Ontario Agricultural College, will be of interest. In the spring of 1902, and again in 1903, uniform samples of two varieties of oats were selected and submitted to special treatments with the object of killing the spores of smut adhering to the grain. The first treatment was immersion in hot water, the grain being placed in a bag, which was immersed in water at about 115° F. Soon afterwards it was placed in water kept at a temperature between 130° and 135° F. The grain was occasionally stirred, and allowed to remain in the water for fifteen minutes. It was then spread out to dry on a clean floor, where it was stirred occasionally. Treatment No. 2 consisted of a five minute immersion in a solution of one pound bluestone (copper sulphate) in one gallon of water. The third treatment was a twelve-hour immersion in a solution of one pound of bluestone in 25 gallons of water. The fourth lot was sprinkled

is very bad the treatment would prevent a much greater loss than here indicated. As a few ounces, costing less than ten cents per ounce, would be sufficient material, it is apparent that the cost, even including labor, is comparatively trifling.

In the writer's experience with formalin, he has inclined to think that it delayed somewhat the germination of the seed, a point on which other observers agree. He could never conclude, however, that any injury to the crop resulted, while the effectiveness of the treatment in preventing smut was all that the above experiments indicate. We would like to secure the experience of others who have used formalin, or other preventives, for this purpose, together with any points of value which have come under their observation.

The Application of Ashes.

To the Editor "Farmer's Advocate":

Sir,—In the recent issues of the "Farmer's Advocate" reference has been made to the use of wood ashes. J. C. S. gives good advice when he says, "Make the best of the manure and grow plenty of clover, and it will not be necessary to buy ashes or other fertilizers to make farming a decided success." His experience seems to show that ashes are not needed on the land on his farm, or in that particular neighborhood. Yet this is not true of all sections.

The three substances specially required by plants to induce a healthy and vigorous growth are potash, phosphoric acid and nitrogen. All three substances have their own particular part to perform in the development of the plant, and no one can take the place of another. The natural plant food of the soil comes from many sources, but chiefly from the decaying vegetable matter, and the weathering of the mineral materials of the soil.

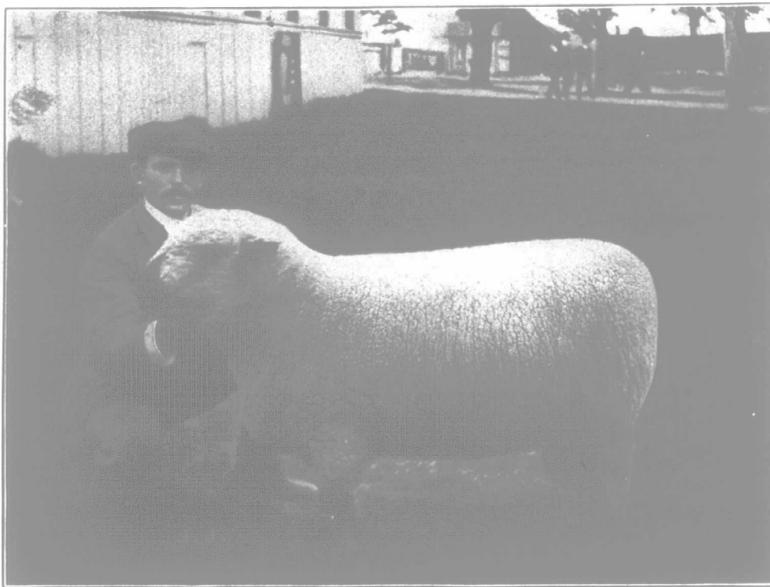
By both of these processes plant food is brought into solution somewhat slowly, except under favorable conditions, and both supply potash and phosphoric acid, but only the former supplies nitrogen. Comparatively recently it has been proved that leguminous crops may gather nitrogen from the atmosphere, and thus have at their disposal the immense amount of nitrogen which is in the atmosphere around them. Consequently, it is only for special crops and under special conditions that nitrogen need be applied to the soil other than as farm-yard manure.

In the case of potash and phosphoric acid it is somewhat different. The supply depends upon the nature of the rock from which the soil was formed, and the amount of these constituents returned in the form of manure. Clay soils are formed largely by the decomposition of feldspar, which contains large quantities of potassium. These soils, therefore, usually contain large quantities of this substance, the availability of which will depend largely upon cultivation and drainage, etc. On the other hand, a sandy soil is formed largely from the coarser parts of the decomposed rocks, and does not contain nearly so much potash as clay soils. Those soils naturally rich in organic matter, such as swamp soils, are also deficient in potash; therefore, on sandy soils or swamp soils it has been found that ashes will give good results. As has been said, clay soils contain plenty of potash, consequently ashes will not give their best results upon these soils.

Another point that must be considered in the use of wood ashes, is that plants differ in their power to take up the different constituents of plant food. Leguminous crops have difficulty in getting potash, and require a considerable quantity of it; small fruits also require lots of potash. On the other hand, the cereal grains do not require large amounts of potash, and seem to have the ability of attacking the different forms in which potash may be held in the soil, and are, therefore, able to take up potash which would not be available to such crops as clover and peas.

Consequently, it must follow that if wood ashes are applied on well-cultivated clay soils, for such crops as oats or barley or wheat, we need not look for striking results. If, on the other hand, they are applied on sandy soil for leguminous crops, for small fruits, or the various garden crops, very striking results may be obtained.

The amount of wood ashes which should be applied per acre will, of course, vary with conditions, but from 50 to 75 pounds of potash (K₂O) is considered a good



Belvoir Sirdar.

Shropshire shearling ram. Winner of first prize and champion sheep, Canadian National Exhibition, Toronto, 1904. Imported and exhibited by Richard Gibson, Elcawarr, Ont.

with a solution of one pound of bluestone in ten gallons of water. They were thoroughly moistened, while being carefully stirred. Treatment No. 5 consisted of a two-hour immersion in a solution of eight pounds of potassium sulphide in fifty gallons of water. Lot 6 was immersed twenty minutes in a dilute solution of one-half pint formalin in twenty-one gallons of water. Lot 7 was sprinkled with a solution of one-half pint formalin in five gallons of water. Lot 8 was untreated. After the tests had been completed a few days, the oats were carefully sown on separate plots, and examined frequently when the oats were coming into head. The following table gives average results noted in percentage of smutty heads:

Treatment	Percentage of smutty heads
1. Immersion in hot water	9
2. Five minutes' immersion in bluestone solution	13
3. Twelve hours' immersion in bluestone solution	13
4. Sprinkling with bluestone solution	14
5. Immersion in potassium sulphide solution	17
6. Immersion in diluted formalin	19
7. Sprinkling with diluted formalin	19
8. Untreated	17

Commenting upon these figures, Prof. Zavitz remarks that the treatments with hot water, formalin and twelve-hour immersion in bluestone solution gave the best results in each of the two years. The formalin treatment is easily performed, comparatively cheap and very effective. The untreated seed had an average of 17 per cent of smutty grain. That would amount to a loss of about twenty-five bushels in a ten-acre field of oats. In those seasons in which the smut

dressing. Therefore, if wood ashes contain five per cent. of potash, 1,000 pounds of ashes will contain 50 pounds of potash. Where wood ashes can be got at five or ten cents per bushel, they furnish an exceptionally cheap form of potash.

We are this season intending to carry on a number of experiments with potash on different soils with various crops, and will, we hope, in time collect some definite figures bearing on these points.

Ontario Agricultural College. R. HARCOURT.

The Farmer's Share of Profits in Sugar-beet Industry.

We noticed an article in the "Farmer's Advocate" a couple of weeks ago, from a Scarborough Township farmer, saying that sugar beets ought to be bought on a sliding scale. We agree with him on that point, and can see no reason why we should get no more for beets when sugar is worth over six cents a pound than when it is only four or less. When wheat is up, flour is also up, and so with everything else. We don't want to hurt the sugar-beet industry, would rather encourage it, but as the manufacturer has had a very favorable year in 1904, why not try and come at some arrangement for sharing in the advance of the price of sugar, which, in all probability, will remain up for this year, owing to the tax on it. There is a vast difference between a twelve-per-cent. beet worth \$1.00, when sugar is four cents, and when sugar is worth over six cents.

Our beet-sugar industry is highly protected here, and still the Marine City Co., with over one dollar a ton duty, pays as much for beets on this side of the line as Wallaceburg does, and have secured quite a large acreage this year. All we are anxious about is that the farmer shall have a fair share of the increased value of the finished product, and without that we will have to step down and out of the growing of beets with the high price of labor at the present time.

Lambton Co., Ont. BET-GROWER.

United Effort in Tree Planting.

To the Editor "Farmer's Advocate":

Sir,—Is it not strange that so much is being written on the progress and resources of our Dominion, and so little said of the vast waste that has been and is still being made of the forests of our vast country. Canada, and especially Ontario, as we all know, was originally a wooded country naturally, and as such was possessed of the finest climate on the continent, but by the ruthless and extravagant destruction of our forests, Canada is fast becoming a country of blizzards in winter and severe drouths in summer. Is it not time that our legislators took up the question and made it compulsory on every municipality to plant and protect trees, at least along the roadsides and waste places that have been made useless for any other purpose? In some few districts a spasmodic effort has been made to replant certain sections, but no united effort seems to prevail. No adequate attempt at reforesting the country has been made, especially when we consider the immense advantage it would be, not only as an influence on the climate and the prevention of snow-blocked roads, but also to the shelter it affords the crops, and the comfort to the homes of the people and stock. All this could be accomplished with a very trifling expense to the country, as almost all the trees required could be obtained in the counties where required. Maple, elm and spruce are found growing wild in most of the counties in Ontario, and if a united effort were made by all the municipalities to this end, the comfort and benefits to the next generation would be incalculable. I believe if Farmers' Institutes would give this subject a little more prominence in their discussions, a mighty good could be accomplished.

We are glad to note the continued improvement in your valuable journal. May you long continue to wield the pen of progress you now have attained.

Ontario Co. R. L. HUGGARD.

Two-day Institute Meetings.

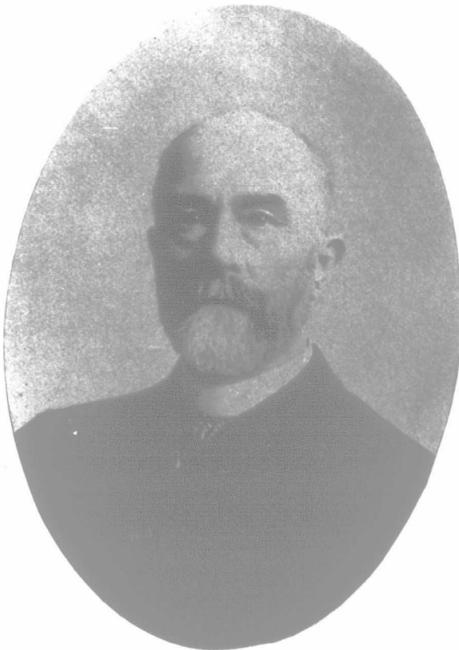
Members of Ontario Farmers' Institute delegations report to the "Farmer's Advocate" that the two-day gatherings are proving the best attended and most effective. In such cases the meetings can be made very much more of an event for the locality, creating keener general interest and enthusiasm. With a good strong delegation, prepared to discuss subjects of practical interest in the locality, and properly equipped to illustrate or demonstrate what they are talking about, there would seem to be reasonably good prospects of sustaining the usefulness of the work. The two-day meeting gives the people and delegates an opportunity to become acquainted with each other and the prevailing conditions, and to follow up with enquiries statements made from the platform. Delegates become fortified with more intimate knowledge of problems that concern their hearers, and the result is more thorough work, which should be of greater service in planning for another season's campaign.

Plank Barn Frames.

To the Editor "Farmer's Advocate":

I notice, in your issue of February 26th, page 226, a letter from Essex Co., Ont., with reference to a plank-frame barn. I would be very much pleased and obliged if the writer would send you a drawing of plank frame, say of one bent, for a barn forty feet wide, with eighteen-foot sides and hip roof; also, how girts are put in to be stiff enough to stand the pressure of being filled with grain, etc.; also, any other points in such a frame as would be of use to any person putting up a barn, as the item of cost in timber is getting to be a serious problem with those who are contemplating building. Would the writers of same send a full description and particulars to the "Farmer's Advocate" for publication. It might be of much benefit to many of your readers.

Ontario Co., Ont. LEWIS FORSYTH.



Jno. G. Barron, Carberry.

The new President of the Manitoba Cattle-breeders' Association.

Agriculture in the Public Schools.

"Do you ask why our boys are leaving the farm?" says C. W. Burkett, in Progressive Farmer. It seems to me that this is the answer: The farmer's child enters our public school. He is there taught arithmetic and grammar. If he shows a special desire for knowledge, and his father can spare him from the farm, he may be given instruction in Greek, Latin, English literature, and modern and ancient history. It is then thought that he has enough education to make him a farmer, and he is taken from school and put to work on the farm. He has spent fourteen or eighteen years of his life studying a smattering of everything in the educational calendar, except the one industry the special knowledge of which is to determine his success or failure in life. This boy watches the corn plant from day to day as it grows to maturity; but he is altogether ignorant of the method of its growth. He can tell you the name of every Roman that ever spoke in the Roman Senate, but to save his life he cannot explain how the plant takes its food from the air and carries it to the leaves, and there converts it into available plant food. He can relate to you the interesting retreat of the ten thousand, but he cannot tell you how to stop the advance of the army of bugs across his father's potato patch. He is no blockhead. He can take a pencil and paper and draw and figure and prove any problem in geometry, but with all his book-learning, he cannot tell you how the soil can be better tilled in order to better conserve the moisture through the coming drouth. He is disgusted with the farm and farm life, because nothing in his education has ever suggested a way for him to solve problems with which he is confronted, and thus disgusted he leaves the farm and goes off into the city, and we hear of him occasionally making a success, but the ninety and nine—no glowing report is heard of them. The boy's education has driven him from the farm. The moment you give him an agricultural education you have solved the question of keeping him on the farm.

"You say that we would do this if we could; it is not possible, because our teachers are not trained to teach agriculture." I believe that if we wait until the teacher voluntarily trains himself or herself to teach agriculture, we will wait until the judgment day. If,

on the other hand, we accept the dictum, that 'the proper way to do a thing is to do it,' and the proper way to teach agriculture is to teach it, then very soon our teachers will prepare themselves, and they will teach agriculture just as successfully as they now teach any of the other studies in the school course.

"I would teach agriculture as everything else is taught in the schools. I would use a text-book; assign lessons; perform simple exercises; train the pupils in lines of observation and judgment, and in doing so, create an enthusiasm for this great field of nature that can never be stayed. I hear some critic object on the ground that our school course is already filled, and there is no room for agriculture. All I have to say to that is, simply make room for it. I say that agriculture is so important, that if there is any crowding out to be done, let us crowd out some of the things that are less important. The country school is the farmers' school, and it is a mark of ignorance to say that this farmers' school shall not teach agriculture. There is room for it there, and if one wants to help the school and the people, there will be little or no difficulty in finding a place for agriculture. Let us remember that we can never straighten the oak after it has been twisted and turned for years by the tempest; so if we want to fill our children's minds with the right principles and start them in the way we want them to go, we must begin with those children while their minds are fresh and vigorous, and teach them to understand nature and to love the old farm. Let us then begin a work that has been too long neglected. Let us raise our voice henceforth for the farm boy and for farm life."

DAIRY.

The Production and Care of Winter Milk.

Canadian dairymen seem to have lessened their efforts in the production of winter milk, consequently we have a shortage, and a period of higher prices. Not many are in a position to avail themselves of the good prices now offered for dairy products of all kinds, and especially for fine butter. The essentials for economical production are:

1. Fresh cows. It is unsatisfactory trying to produce milk with a herd of cows most of which have been milking during the past summer. At least one-half of the cows should freshen between the first day of November and the last day of February.

2. A moderately warm, clean, light, well-ventilated stable is a great aid in the economical production of winter milk. Cold and badly-ventilated stables mean added costs for feed.

3. Cheap, succulent food is needed. This is best got by providing corn silage, mangels, clover hay, and suitable meal. A very good ration for a cow giving 40 pounds of milk daily, or making 1 1/2 to 2 pounds of butter per day, is 30 to 40 pounds corn silage, 30 pounds mangels, 8 to 10 pounds clover hay, 4 pounds bran, 3 pounds ground oats, and 1 pound oil cake. If possible, cut the hay, pulp the roots, and mix the bulky feed together for a few hours before feeding. Add the meal to the bulky part at the time of feeding. The foregoing amounts may be divided into two portions, and one-half be given to each cow night and morning. The cows should be fed regularly, and each animal should be under close observation by the feeder, in order to note her appetite, response in milk flow, and other conditions. If the feeder finds that the cow can profitably consume more than eight pounds of meal daily, then extra meal may be given. Careful feeders who weigh the milk from each cow will soon learn the limit of profitable feeding for each animal.

If the cow be kept clean, and the milk be drawn in a cleanly manner, into a clean pail, by a clean person, and be removed shortly after straining, from the barn, there is no reason why winter milk should have a "cowy odor." This "cowy odor" is usually caused by filth which drops into the milk during the milking, or is absorbed by the milk from the foul air in the stable.

Milk should be removed from the stable before it cools to the temperature of the stable air, otherwise it will absorb taints rapidly.

After straining, the milk does not usually require any special cooling other than that which takes place from the cold air, if it be stirred occasionally to prevent the cream rising, and to insure uniform cooling throughout the whole mass of milk. It is also necessary to prevent the milk freezing in order to obtain the best results.

If sent to a winter creamery, it should be delivered at least three times a week. If manufactured on the farm, it should be made into butter as soon as possible after it is drawn from the cow. The longer that milk is kept before being made into butter, the poorer will be the product.

H. H. DEAN.

It is not simply for the prizes that you offer, but for the store of knowledge one gets every week which makes me blow your worthy paper. Durham Co., Ont. GEO. STAPLES.

Cheesemaking.

By C. N. Ralph.

As the years advance we are also trying to advance in producing better cheese or butter, and in order that we may get the latest and most scientific methods in dairying, it is well to attend a dairy school, but there are some who are not in a position to do so, and to these I would say, engage the instructor, follow his methods, and I am sure you will have no trouble. Again, some makers, who learned the business ten or fifteen years ago, think they know enough without going to a dairy school, or having an instructor either. Well, I would say, if these men would take a course, or even engage the instructor, the cheese and butter business of to-day would be greatly improved, and they would find that a better article could be produced with less labor.

The acidimeter has taken the place of the hot-iron in the most of cases, and I believe in the future it will be found in every factory. I think it is quite possible to have your cheese very uniform the whole season through with it, whereas with the hot-iron there was considerable variation, and the consequences were your cheese were not uniform.

In the two or three seasons prior to 1904, the price for cheese was very high, and in return for this the buyer expects a fancy article. How are we to get this? In the first place we must get in close touch with the farmers, and explain the necessity of cooling and aerating their milk, and I believe it would be advisable to supply each man with a printed card, such as this:

CARING FOR MILK.

1. Give the cows pure, sweet, wholesome food.
2. Plenty of pure water and salt should be accessible at all times.
3. Cows should be milked with clean, dry hands, after wiping teats and udder with a damp cloth.
4. Milk should be strained and cooled to 60° F. immediately after milking.
5. Be sure and have cans and pails strictly clean.
6. Do not keep cans or pails in a place where there are any bad flavors, such as barnyard or pigsty.
7. Wash all tinware with lukewarm water and a little sal soda first, then wash with hot water; then SCALD with BOILING water.

In the morning get up in time to have all your cheese turned, and 70 lbs. steam on, before any milk comes in, then you can give your full attention to the milk. Do not use any steam till you have 65 or 70 pounds pressure on. Keep your bottom draft closed, or nearly so, and I think you will have no difficulty in maintaining steam throughout, and a great saving will be effected.

See that the vats are clean and free from dust, and weigh in the milk yourself if possible. Refuse any bad-flavored or overripe milk. Right here is where many a man makes a mistake, by saying, "We got along all right yesterday with such milk, we can do it to-day." If you would send bad milk home, you would be money in pocket at night, have a better average; and last, but not least, you would have a better quality of goods. It is possible to make a salable cheese out of bad-flavored or overripe milk, but if you refuse such you run no chances.

When you have say one thousand pounds of milk in your vat, try it with the acidimeter, and if the acid will allow it, I would heat it up slowly, so that your temperature would be 86° F. when you have the desired quantity in the vat. Try it again, and if it does not show .2, add 1 or 1½ pails of starter to a vat with 5,500 lbs. of milk. Starters should be pasteurized to 180° F., and ripened at a temperature of 60°. In case your starter is not good, I would not use any, as it is a drawback, but I think if a person is clean and careful it is possible to always have a good starter.

If you are making colored cheese, it will be necessary to add the color here. In the most of cases 1 oz. to 1,000 of milk is sufficient, except in spring, when more is required. Be sure and stir it in thoroughly.

If your milk now shows .2, I would add the rennet at the rate of about 3 ozs. to 1,000 lbs. of milk. Put the rennet in an 8 qt. pail, about ¾ full of pure cold water. In the spring use 4 ozs. Stir in thoroughly, and then let it set perfectly still, and be careful there is no draft blowing over it, as this will cause the top to cool, and it will not properly coagulate. You will find it will coagulate in from seven to ten minutes, and I would cut early; usually 2½ times the time it takes to thicken is sufficient. I prefer a 1 inch knife. Cut very slowly, as this is where the cheese are made. Use the horizontal knife first, by letting it cut its way to the bottom of the vat. Do not shove it down so as to smash the curd. Then cut very slowly lengthwise of the vat; then with the perpendicular knife cut crosswise and afterwards lengthwise. If you only have a ¾ knife I would cut it once more with the horizontal knife lengthwise of the vat, as I believe there is nothing like a good "cook." After you have finished cutting, I would start the agitators slowly; if you have none, I would strongly recommend a McPherson rabe, which, I think, is nearly as good. Have the teeth as long as the depth of your vat (good maple wood makes a durable rake); teeth about ½ in. thick. The teeth are set in a 2x2 inch crosspiece 2 ft. long. Stir the curd slowly at first. Try it as soon as the whey comes to the top freely. It usually shows 14 to 15 points. I would stir slowly for about ten minutes, and then heat up gradually, taking about 1½ hours from time of setting till you get it to 98°. In some cases it will require to

go to 100, or even higher, especially in the fall. If you find the acid is not developing fast enough, I would turn the steam off at 92°, and keep stirred enough so it will not mat together. When you find it has 16 pts., heat it up to the desired temperature, which is usually 98°, and in the most of cases you will find your curd will work right along. By holding at 92° you retain the moisture in the curd, whereas if you heated it right up you would expel a lot more moisture, consequently the acid will develop much faster at a temperature of 92°. In case it had too much acid after cutting, I would heat it a little quicker. Here is where you find the acidimeter a benefit—you know just exactly how your curd is working, and how to go at your work. I prefer to have a curd come along fast enough in order to get about 1-2 or 2-3 the whey off in about 2½ hours from setting. This helps firm up the curd, and you can get it out of the whey much more rapidly. When it shows .2 acid with whey down, which should be in 2½ or 3 hours, I would dip it. If all the whey be on, I would dip with .1905 acid. In the spring, when you have a lot of new-milking cows, you will find the acid will develop very rapidly at this stage, and it is well to get it out a trifle soon rather than a trifle late.

After you have it dipped in a clean drainer with racks in, and a good clean cloth over them, stir about three times, and then let set a few moments; then pile up about 8 inches deep for cutting. If your curd is well cooked, this amount of stirring should be sufficient, although there is no rule. At any rate, stir very dry, till there is scarcely any whey running away from the drainer. It is well to try it at this stage, and it ought to show about .3.

(To be continued.)



Alex. Hume, Menie, Ont.

President Canadian Ayrshire Cattle Breeders' Association.

Teaching the Calf to Drink.

Gently place the calf's nose into the milk, which must always be blood heat. Put a very small amount of milk in the pail, or receptacle in which your calf is fed; one-half inch is sufficient, and push the little bovine's nose down onto the bottom of the pail. It will soon learn that you are performing a friendly act, and will get a taste of the milk and begin to suck, sip and bunt the bottom of the pail. Add to the milk, and continue the good work until the calf gets enough. Do not put in enough to cover the nostrils. One or two such lessons and the calf will readily take care of all the milk that it should have, and will not be so likely to gulp it down to the injury of its digestive apparatus.

Western Ontario Dairy Instructors.

The Board of Directors of the Western Ontario Dairymen's Association have appointed the following cheese-factory instructors: J. Scott, Culloden; C. C. Travis, Eden; F. Horns, Strathroy; Alex. McKay, St. Mary's; James Burgess, Strathroy; Robert Greene, Trowbridge; and Frank Boyes, Dorchester. The following were chosen creamery instructors: C. W. McDougall, Guelph, and Fred Dean, Strathroy. A tenth man will be chosen to take up both creamery and cheese-factory work. A resolution of appreciation of the services and ability of the late Provincial Minister of Agriculture, Hon. John Dryden, was unanimously adopted. The new Minister, Hon. Mr. Monteith, will be interviewed on behalf of the work of the Association.

I had thought of dropping the paper, but the varied and interesting items that are continually appearing seem to make it desirable as a household paper as well as a farmer's guide.

Mountain St., Montreal, Que. W. ROBERTS.

The Fat Testing of Cream by the Babcock Methods.

(From Bulletin 58, B. A. I.)

Men who used the test daily were found to be at fault in many particulars, and in some instances not the first idea of the principle underlying the method seemed to be in the mind of the operator. Much of this has grown out of carelessness on the part of the user, and much is due to improper instruction given for the use of the test as applied to cream.

It may be stated that a large part of the creamery men are gradually departing from the rules for operating the Babcock test, as prescribed by standard works on the subject. There are various reasons for this, but uppermost is the shortage which these creameries are experiencing in the overrun or churn yield. In many cases the test is read lower than the instructions would warrant, and in others the methods of sampling and measuring the cream into the test bottle are modified in one way or another. In practically all cases this is not done with any thought of "robbing the patron," as the phrase is commonly put, but it is done with a conviction that present methods are somewhere at fault, and the attempt is made to even things up and still give everybody his due.

Instances were found where the creamery, as operated under the hand-separator system, was getting considerably less butter from 100 pounds of butter-fat from cream than they had formerly obtained from the same measure under the whole-milk system. This seemed to indicate plainly that the method of testing was at fault, for it was justly argued that 100 pounds of butter-fat should make the same amount of butter, whether bought as cream or as whole milk.

The three vital points in making a test are: (1) A true sample of the cream to be tested; (2) an exact quantity of the sample in the test bottle; (3) reading the test accurately. These three statements seem simple enough at first glance, but they are more complex in actual practice, as many a creamery man has been brought to believe when the month's business was checked up.

HOW TO GET A UNIFORM SAMPLE.

When the can of cream arrives at the weigh platform, there are some things of importance to be noted. If the patron has used water to flush or wash out the last of the cream after separating, in most cases this water would be in a layer on the bottom of the can. It is possible that thorough stirring at the farm would overcome this difficulty, but usually this stirring is not done, and the water is in the bottom of the can. The portion richest in butter-fat is on top, and there is a gradation which varies with every inch of depth from the richest cream down to the water. The cream may be thick because of the great amount of butter-fat in it, it may be thick because it is sour, or it may be thick from age. The first and most important thing in getting a true sample in any of these cases is to make the cream to be sampled uniform throughout in richness and in physical condition. If this is not done, the first step has gone wrong, and every succeeding step will be wrong just to that extent. The final result will be wrong, and in nearly every case the creamery is the loser and the patron the gainer.

This uniformity of the cream can best be obtained in either of two ways—pouring or stirring. It can never be properly done by shaking. Pouring from one can to another is the best way to do it.

These methods will answer the purpose in every case except three: (1) The cream may be so thick it will not pour; (2) it may be frozen, or (3) it may be churned. Warm the thick cream until it will pour. If no heat is available for this work, the creamery operator will have to make a guess at the richness of the cream, or test it, and probably overestimate the amount of butter-fat it contains. When the cream freezes, it is the water which crystallizes out, leaving the richer part of the cream in the center of the can. If a test is made of this central portion the result may be from 1 to 20 per cent. too high. It must be thoroughly thawed out and mixed. When the cream is churned, if such cream is received at all, test the buttermilk and estimate the butter.

If a tester by careless methods of sampling makes his average test one-half of 1 per cent. too high, the result will be astonishing. This amounts to five pounds of butter-fat per 1,000, and at a creamery making 5,000 pounds of butter per day the loss would be 25 pounds, or \$5 per day, figured at 20c. per pound; in a creamery making 20,000 pounds per day it amounts to \$20 per day. Combine this with the loss previously mentioned and it means a total loss of over \$900 per month, if there be 5,000 patrons and a make of 20,000 pounds of butter per day. These losses have actually occurred in many instances, at the above ratio per thousand patrons.

There are two general methods of procedure in practice after securing the correct sample, namely, by testing each delivery as it is made, or by making a composite sample, which is tested each week or semi-monthly, or in some cases only once a month.

This is for many reasons a better method than taking a composite sample. The cream is in better condition to test. There is no chance for loss by evaporation, and an absolute check can be kept upon the work each day. The chief objections to it are the

extra time and greater amount of acid required for doing the work.

THE COMPOSITE SAMPLE.

There are several things leading up to the measuring of the sample into the test-bottle, which will be considered first, as they have a direct bearing on the final result.

The Sample Jar.—When a composite sample is kept, the sample jar is of great importance. It must have a perfectly tight cover to prevent evaporation.

In the summertime composite samples will sometimes show a separation into layers, the lower portion being whey and the upper part fat and casein. Such samples do not look well, but so far as observations go this does not to any appreciable extent influence the test, provided they are thoroughly mixed before the sample is taken. In the winter season it has not been shown that a preservation other than the cold weather is needed. In shaking composite samples to mix preservative and cream, always give a rotary motion to the hand, as this causes the cream to flow around the bottle. A violent agitation will often churn the contents, thus destroying to a great extent the usefulness of the sample.

READING THE TEST.

This seems the simplest step of all, and yet it has been proven the hardest. Mention has been made of the fact that creamery men were reading the cream test lower than standard instructions warranted. They doubtless reasoned that the test must be too high, or they would get an overrun equal to that obtained under the whole-milk system.

If we calculate that about the same amount of fat is held back in the bulb of all bottles, regardless of size of the neck, it will be seen that the differences regularly increase as the necks of the bottles increase in diameter.

Therefore, the shortest rule that can be given to correct the error due to the meniscus (crescent-shaped surface of the fat in the neck of the bottle) is as follows:

Read the test from the extreme top to bottom of fat columns; deduct from this reading four-fifths of the depth of the meniscus, and add 0.2 per cent. to the result.

In view of the fact that nearly every error in sampling and making tests tends towards a larger reading than the correct one, the addition of the 0.2 per cent. might safely be omitted and no injustice done to either party of the transaction.

There has been an objection raised against the long-necked cream bottle, to the effect that so long a column of fat necessarily shows more expansion, and greater care must be exercised to have the temperature just right. A careful consideration of the expansion table will not bear out this assertion. Butter-fat expands volumetrically. Cream-test bottles are graduated volumetrically, and will take care of any expansion, no matter what the shape of the neck. With the long scale and the narrow neck the expansion is measured in just the same proportions as in a short scale and wide neck.

The hand-tester will, as a rule, give nearer the right results than the steam-turbine tester, because the fat from the hand-tester is usually read nearer 120°. The steam machine may heat the bottles to 160° F., and if read at this temperature a little calculation will show the nature of the results. If the steam machine is run with the lid raised an inch or two, better results will be obtained. This will allow an air current to be drawn through the machine, and the temperature will thus be kept down. If bottles are placed in a water bath to bring them to the right temperature for reading, they should remain in the bath for twelve to fifteen minutes before being read to insure an even temperature of fat and liquid below the fat, and to insure a straight line between the two.

INCORRECT READING OF TESTS AND THE FINANCIAL RESULTS.

It has been stated before that a difference in test of one-half of one per cent. would amount to \$1.00 for every 1,000 pounds of butter made, if valued at 20c. per pound. In the preceding discussion it is shown that in the matter of reading the test alone a difference of 1.7 per cent. can be made. Figured on the same basis as the above, this would equal \$3.40 per 1,000 pounds, or \$68 per day on an output of 20,000 pounds.

The methods of operating and the basis of paying for butter-fat in the centralizing plants give the farmer all there is in it. In other words, the farmer in most cases gets a price for a pound of fat or the cream containing it, which, together with the transportation charges on this cream, will equal the selling price of a pound of butter. The creamery must make its profits and pay its running expenses out of the overrun it is able to obtain. If this overrun is cut down through mismanagement of any kind, profits are gone. Instances are now on record where concerns have become bankrupt through bad management along these very lines. The test question is but one item in the way of successful operation, and the things pointed out in this bulletin are not all the corners that must be watched in getting a proper overrun; but so far as the testing goes, this bulletin points out the dangers which are of vital importance to the creamery manager.

The butter-fat paid for and the butter-fat received are found by testing at the station and at the factory. Where this was checked against a low churn yield, this and the difference between the test called for an invest-

igation. Not all of it can be laid at any one thing, but with careless sampling, loss of cream by spilling, etc., reading the test at too high temperature, and reading the full meniscus, the losses may be found. The differences between the station and the factory tests are in the main due to poor work in sampling and testing at the station. It is a noteworthy fact that the tests at the factory are made more carefully than those at the station. The station tests, as a rule, are made by pipette rather than scales. In most cases a correction table is used to correct the errors made by pipette measure. Although this method gives lower results than with the scales, the faulty methods of sampling, combined with too high reading, still give the station a higher test than shown at the factory, where the samples are usually weighed and more carefully read.

During the past year the creamery companies that have kept any records of their work have been cutting down this difference between tests, and helping to correct the low-churn results. It is hoped that the ideas given in this bulletin will be of some benefit to them; along this line and the great probability that they have sustained it, although ignorant of the fact.

of the flesh. Surely this is a point in their favor, as corn is the very best grain to finish off on.

The White Wyandotte is a very nervous bird, and the least excitement seriously affects their laying. In this respect, the Orpingtons are very quiet, and take things coolly.

I have June-hatched pullets that have layed since November, while the Wyandottes hatched the same time, and under the same conditions, began only about two weeks ago. This shows that the Orpingtons are not so slow in growing after all.

Now, in conclusion, while I do not wish to condemn the White Wyandotte, I don't believe they are a perfect bird by any means. I believe any farmer will succeed, whether he has Orpingtons, Rocks or White Wyandottes, if he gives them proper care and attention. C. E. BROWN, Waterloo Co., Ont.

Care of Laying Hens.

Where pullets for laying are raised, it is well to separate them from the cockerels early. Unless the latter are of special value as breeding stock, it is best to dispose of them as soon as they are fit for market. The pullets are thus given a better chance, and will come forward more rapidly. Pullets will lay earlier if moved to their house early, so that they may become thoroughly accustomed to their new home. Moving hens or pullets to new quarters always checks their laying instinct. Laying stock should be so managed as to keep them free from lice, in good condition, thoroughly vigorous and active. In order to keep them active, no better means has been devised than giving them all dry grain, scattered over a thick layer of straw. This should be placed in a scratching-shed, or in the regular pen if there is no scratching-shed. This straw should be changed as often as may be necessary to keep it fresh and clean.

Every flock of hens should have a dust box, which should be of sufficient size to accommodate a considerable number of birds at one time. It should be kept where the sun will shine on it. If given access to a good dust bath there should be comparatively few lice. Still, where hens are kept in close quarters the dust bath may not be sufficient; hens should occasionally be dusted with good insect powder. To do this a good way is to hold the hen by the legs in a small box, shake the powder among the feathers, and by rubbing make it reach all parts of the body possible, especially under the legs and wings. This should be done thoroughly. The box will catch whatever powder falls, and this, of course, may be used for other hens. The fowl should be carefully watched, and whenever lice appear insect powder should be used. As a further means to keep down these pests, the roosts and nests should be occasionally washed with kerosene. Hens infested with vermin are uncomfortable, and will not thrive nor lay well.

Everything around the fowl should be kept as clean as possible. The water dishes should be rinsed every day, and washed at least once a week. Fresh water should always be supplied and changed daily. The dishes should be placed so that the hens will not scratch them full of dirt, and yet not so high that they cannot be easily reached. If the house has a passage in it, the water dishes should be placed so they can be reached from the passage.

Hens should be furnished with plenty of sand or gravel for grit. This will probably furnish all the grit needed, but if it does not contain good sharp grit, then they should be supplied with artificial grit; otherwise they will fail to digest their food thoroughly. The grit should be kept in a box where it will not become fouled, but where they can easily reach it. Laying hens should have all the oyster-shells they will eat; but if they are not laying, these are not required. It is a good plan to keep broken charcoal where hens can reach it, as it appears to exercise a very good influence upon the health.

There is still much diversity of opinion as to the proper method of feeding for eggs. A very good method is to put all the kitchen scraps into a kettle, and cook every evening, adding salt. In the morning, heat the second time, and scald with the scraps one pint of bran and one pint of a mixture of equal parts corn meal and ground oats; to this add a small quantity of scraps. The mash, when completed, should be dry and crumbly. At noon feed wheat in the straw; at night mixed grain; and in their mash give sulphur twice a week. If this is done condition powders should not be needed. Some poultrymen claim the mash should be given in the evening instead of in the morning, since the hens are more likely to become sluggish after a feed of mash than they are after a feed of grain, where it is scattered in the straw. An exercise is essential to health and good egg production, it may, therefore, be best to keep the hens at work during the day, and give them their mash before going to roost.

The house is very important for the laying hens. It should be sheltered from north-west winds, if possible. Sunshine is a very desirable factor, hence the house should have windows on the south, if it is possible to build in that manner. Farmers often make the mistake of putting in too much glass. With too many or too large windows, the house is too hot during the hours of sunshine and too cold at night, and fowl suffer frequent colds. On the farm poultry are often kept in a part of the barn partitioned off from the rest. If the room can be made on the south side, in such a way that it will be warm, light, and well



Stephen Benson, Neepawa, Man.

President Manitoba Horse-breeders' Association for 1905.

POULTRY.

The Buff Orpington as the Farmer's Fowl.

After reading Mr. Langelier's article in your late issue, one would think that the White Wyandotte was the only breed worth keeping. Now, I think I can give a number of points where the Buff Orpingtons excel them.

In the first place, in the different experiments carried on at the O. A. C., the Orpingtons have laid more eggs than the Wyandottes by nearly fifty per cent. during November, December, January and February, when eggs were at their highest prices. And this is the time we want lots of eggs, and not in the warmer months, when eggs are selling away below zero.

He states that the W. W. is the king of broilers. I should like to ask where the profits come in for the farmer to raise them. I know for a fact that the average life of a broiler-plant in the U. S. is five years, and in Canada I never heard of one paying.

With regard to Rocks and Orpingtons going off their feet, I have seen plenty of White Wyandottes go off as well. There is no breed perfect in this or any other respect.

Again, he says the White Wyandotte is the most profitable market bird. Let him consult his Government bulletins for facts. The Orpington is as quick a grower as the White Wyandotte and it is no uncommon thing to see them weigh over five pounds at four months old. If they are such excellent birds as he says, why don't they make a good showing in the dressed class at the great "Ontario" Show. Last December, there was not a good dressed White Wyandotte in the show, the Rocks and Orpingtons far outclassing them. Also, in the class for utility pen here the Orpingtons and Rocks took the lead.

In feeding for the British market, the Orpingtons take the lead, as they are white fleshed, and the feeding of corn has no effect on the whiteness

ventilated, it will do very well. The cost of a hen-house is not necessarily great, but without doubt they are usually far too cheaply constructed. One should not go into poultry-keeping on any extended scale until one has decided to make it a paying business.

Perth Co., Ont.

A FARMER'S SON.

\$2 Worth of Eggs From \$1 Worth of Feed.

In answer to your query, would say there is not much choice between Rocks, Wyandottes and Orpingtons, with a preference for the whites or buffs. These medium-sized breeds are undoubtedly best for farmers, and compared with the larger, feather-footed tribes, they have more activity, produce more eggs, and, up to six months of age, more meat; also, consuming less food, not such persistent sitters, but sufficiently broody for all practical purposes, and mature more quickly, and, as compared with the smaller breeds—Leghorns, Minorcas and Hamburgs—they are large enough to be of greater use on the table, lay larger eggs (Minorcas excepted in this point), and at a time of year when eggs are hardest to procure, will sit (thus capable of producing their kind without the use of incubators), not so fond of stealing away their nests, take more kindly to yarding and housing, will withstand more severe and changeable weather, with the same housing, without showing any bad effects resulting therefrom. The whites or buffs of any breed are preferable, as the pinfeathers are white, and do not discolor the dressed poultry when killed a little off in condition. There is no breed BEST for eggs, but there are strains of every breed better than other strains of the same.

In feeding, I try to follow, in part, Prof. Gilbert's teachings. Morning, first thing, a little tasty mash, but not more than a pint to twenty-five hens. Then stir up the litter, and scatter a half pint of screenings; this again at noon. Open up the windows and doors, unless storm beats in. During day, clover leaves in trough, also apples and apple peelings. I like to hang cabbage and mangels for them to pick at—high enough that they have to reach or jump for them. I think it best to feed the green bone or other animal food about two hours before sundown each day, about one-half ounce to each hen. Then gave a final feed of grain in the straw, about two quarts to twenty-five hens. Then, at sundown, give a mash composed of cooked potatoes and peelings, with any kitchen scraps, with chop and shorts stirred in until stiff—all they will eat. Water, grit and oyster-shell at will. I think wheat the best all-round grain, if we were compelled to use only one kind. Always, when wheat is high, eggs are dear also, so we can draw a safe conclusion.

Have had eggs all fall and winter in good supply. Have kept account, and have sold more than \$2.00 worth of eggs for every \$1.00 worth of feed consumed. And in growing early chicks for market, have had \$3.00 for \$1.00 cost. I find I can raise chicks to eight weeks for \$8.00 per hundred, and make them ready for market. Yes, my hens pay and pay well. J. R. H. Wentworth Co., Ont.

A Flock with Swollen Heads.

I have eighty hens in a henhouse 18 x 24, well lighted, well ventilated. Have been fed warm mash mornings, mixed grains during the day. Have been laying fairly well, but now I notice about one-third of them have swollen heads, some of them are swollen blind. Can you tell me what the cause of it can be? J. W. B.

Would say that eighty birds in a house 18 x 24 are most too many. I think that seventy is nearer the number than eighty, and perhaps sixty would give as good results as seventy; that is, unless the birds have free access to an open shed attached to a barnyard near by, in which case eighty birds in the house the size you mention would not be too many.

I do not think that the method of feeding would have anything to do with the birds have swollen heads, with the exception that the mash feed would be more favorable to the spread of an epidemic, especially where there is a discharge from the nostrils, than where grain would be. Where there is a mash feed, and a discharge from the nostrils, one can readily understand that more or less of the disease will be spread from the nostrils to the feed with the feed. I am inclined to believe that the swollen heads are due to a draft of some description, or else to water that is not clean, or a drinking vessel which is not properly cleaned; that is, a very common or less slimy on the sides. The veterinarian does not state whether there is any discharge from the nose or not. We rarely get birds with swollen heads with no discharge. If there is a discharge from the nose, the disease will be spread of the types of roup, and all the sick birds should be isolated. I would recommend the use of potassium permanganate; use as much permanganate of potash as can be held on a 1-cent piece in a gallon of drinking water. The birds that are sick should be isolated, but where this cannot be

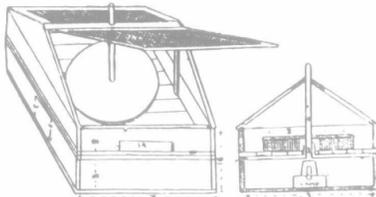
done satisfactorily, I would have no hesitation whatever in killing them. Those that are but slightly affected would, in all probability, be fit for food, but if the bird was at all seriously affected it would be best to bury or burn it. If there is a possibility of isolating the birds, try and put them in a fairly warm place. Feed them some raw onions, cut in small pieces. It would be well, also, to use some permanganate of potash in their drinking water. If there is any discharge from the nose, in many cases, it is beneficial to inject coal oil in the nostrils and the mouth. This can be easily done with an ordinary oil can. If the birds simply have swollen heads, and no discharge and no white growth in the mouth, I think there would be little difficulty in treating the birds, by simply giving them a good dose of salts, say, a teaspoonful between two, and keeping them in a warm place where there is no draft.

At this season of the year, in cases of this kind, one should be very careful to examine the throat and roof of the mouth of the chickens, as in many cases they are covered with white patches, or what is known as canker. Canker is a very bad disease to treat, owing to the fact that in many cases the birds will show no inconvenience whatever until their mouth becomes so sore they cannot eat at all. It will also spread rapidly. If there are only one or two cases, it is best to kill the birds, or, if one wants to treat them, remove the white growth from the mouth and burn the spots with silver nitrate, ordinary strength, as sold by druggists. W. R. GRAHAM, Ontario Agricultural College.

The Brooder.

Directions how to set up and operate a brooder for incubator-hatched chicks will accompany the brooder, if one has been purchased with the incubator. There are brooders for inside and outdoor use. I speak only of the latter. I enclose a cut and description of a brooder which is easy to construct and satisfactory in operation. It was obtained by me from the Montana, U. S., Experiment Station, and is described as follows:

"A box is made three feet square, and of four pieces of eight-inch lumber, surfaced. Upon the top of this box, for a cover, is nailed a piece of zinc entirely covering the box. This zinc has a hole in the center, over which is soldered a pipe 1 1/4 inches in diameter and 22 inches long. This pipe is soldered on the outside, the metal being the top of the box. Next comes the floor over this zinc, but not touching it because an inch strip, 1 by 1, should be nailed on around the outside in order to make an air space between the floor and zinc. This strip should be broken; midway on either side an inch opening should be left for the admission of outside air to the space underneath the floor. The floor should be made of ceiling, smooth surface up. Exactly in the center of this floor a hole should be cut 2 1/2 inches in diameter, and in this hole a pipe 2 1/2 inches in diameter and 3 inches long fastened. This pipe should extend just through the floor, level with the underside of the bottom. Through this pipe the long ventilating pipe will go. This completes the body part of the brooder, and a hover and top complete the requirements. The



Brooder.

hover should be made in the form of a circle two feet in diameter; in the center a hole large enough to allow the vent pipe to pass should be cut, and four legs three inches long tacked on to raise it to the required height; then tack a light fringe of jute sack around the edge only. This is the hover complete.

"Next is the top. Make another box similar to bottom, using four pieces of six-inch lumber, dressed. Upon opposite sides a piece cut with a double pitch, three feet long and one foot high in the center, should be nailed to form the ends and the apex, and joined with a piece 34 inches long and 2 1/2 inches wide, cut with level to allow the screen doors, which should constitute the two sides of the roof, to fit snugly. This box portion should have a little door cut in it, and an incline made for chicks to run in and out of the brooder.

"The working of this brooder is extremely simple. A brooder stove is placed under the box, and it heats the metal cover; this in turn heats the air in the space between it and the floor. This air, on being warmed, rises upward through the 2 1/2 inch pipe and flows out over the chicks that are underneath the hover. Since this air comes through the holes between the 1 by 1 inch strips and does not come in contact with the lamp, a pure and constant supply of air is insured, giving almost perfect ventilation in addition. These brooders serve the purpose very well where only a limited number of chicks are to be raised, but where the

business is to be conducted upon a larger scale, either coal or wood heaters with pipe system is best.

"Hot water incubators are out of date. Hot air is more controllable. A cheap incubator is not always a good investment."

Will the brooder rear the chicks as well as the hen mother? Yes, if the chicks are strong and robust, as all chickens ought to be. Weakling chickens die in the brooder. The mother hen simply kills them by inadvertently stepping on them at night. It is a case of the survival of the fittest. Chickens which require to be molly-coddled ought to be allowed to die. They are probably constitutionally depraved. They should not be bred from if they survive, and are not likely to make desirable specimens for the table. Something may be said on another occasion as to the best ration for chickens from nest or incubator to the laying or marketable age. A. G. GILBERT, Poultry Manager, Central Experimental Farm.

Is Your Poultry House Too Warm?

The editor of Farm Poultry expresses himself on a question of interest at this season to poultrymen, which we subjoin for our readers' benefit:

"I have often gone into a closed house about noon of a winter day to find the house shut tight—water trickling down the walls, the litter on the floors damp, the atmosphere 'rank,' and the fowls presenting a decidedly debilitated appearance. The keeper would, perhaps, explain that they usually open up, but 'didn't get around to it to-day.' I know just how that is myself. I've 'been there.' It happens not once, but often. The days in winter are short, and there is much work to do. A man gets busy with something else, and either forgets his ventilation, or puts it off.

"It was because I saw so much of this, and found so much evidence of it in my correspondence relating to sick fowls, that I decided to try the experiment of using cold houses, practically going back to the plan of housing commonly used a generation ago. In addition to the common troubles in using close, warm houses, there were a few positive considerations in favor of getting somewhere near an open-air basis. First of these was a recollection of sundry instances of very good laying in very cold houses and open sheds. Next, an occasional experience of that kind with hens put in cold quarters, when other quarters were overcrowded, or when it was desired to keep them from laying. Next, the fact that in most scratching-shed houses the open shed was the favorite room of the hens, and, in a number of cases, where, because of lack of room, poultrymen used the open shed for one flock day and night, and the closed roosting-room for another, reports were that the hens that lived and roosted in the shed kept in better condition, usually laid as well, and often laid better than the others.

"My experiment with cold houses was the result of a conviction, to which I was gradually led by such reasons as I have briefly stated above, that the almost universal efforts of poultry-keepers who were trying to make poultry pay, to make hens lay by keeping them warm, were not giving expected results in egg-production, and were giving some very undesirable results in debilitated and diseased fowls. What I have done with cold houses, and what a few others are doing, seems to me to show that, given fowls that can stand the frost, it is easier to keep them healthy and hardy in cold houses in which there is a good circulation of air, than in warm, closed houses."

Egg-eating—Lice.

To the Editor "Farmer's Advocate":

There is a great deal of complaint from some quarters about hens eating eggs, and also feather eating. If hens are fed plenty of meat or ground bone, I do not think there would be any trouble with hens eating feathers. I have found from past experience that if hens do not receive plenty of meat they will take to pulling out each other's feathers, but when I have supplied them with ground bone and meat the habit ceased. Some years ago I was troubled with my hens eating their eggs, and a friend advised me to boil a piece of lime in their feed. I did so, and in a few days the trouble ceased. I have always found that the habit commenced by the hen laying soft-shelled eggs, and then accidentally breaking them. After that, as long as the shells were thin, they would break them. I have had a few persist in eating eggs. Some I have cured by cutting off the sharp point of the bill, and if the shell was hard could not break it. I never use patent egg-boxes, or any of those things advertised for egg-eating hens. I give them lime if there is not enough taken to make shells hard. I feed them some in boiled feed. This year I noticed a few eggs with soft shells, and boiled a few pieces of lime in wheat, fed it to them, and the trouble ceased. That was last week. This week every egg has a shell that will resist a pretty good blow from a hen's bill. I would advise the farmers to try the lime, and if there is one of two that persist in eating eggs, take the head off.

By feeding as I suggested I do not think there

will be any trouble, but it is well to watch, for it is far easier to prevent than to cure.

One of the greatest difficulties I have is to keep hens clear of lice. It requires more attention than anything else. I have tried different remedies, and find sulphur and carbolic acid the best. The walls and roosts should be white-washed, every crack filled. In the whitewash put a quantity of carbolic acid. The hens should be thoroughly dusted, and a quantity mixed in their dust-pan with the dust; also, roosts sprinkled with it. Keep henhouse clean, and the birds healthy by making them work, and have healthy quarters. Keep watch over the birds, and as soon as a louse appears, go over the whole flock with sulphur, and I think the birds will be reasonably free from lice. J. B. POWELL.

GARDEN AND ORCHARD.

The Fruit-growing Business.

To the Editor "Farmer's Advocate":

Sir,—All fruit-growers will agree with the writer in the statement that the present conditions of fruit-growing are unsatisfactory. Surely if the old cry, "It is time for a change," applies anywhere, it applies to our business. The prices of other food products have advanced materially, but the wholesale prices of our fruits have not advanced in proportion. Nevertheless, the retail prices of fruit are often very high, giving tremendous profits to the retailer, while the producer is going bankrupt. The cost of labor, too, has advanced so rapidly that the hired man sometimes gets nearly as much net cash out of his time as the owner of the fruit farm who employs him.

For many years it has been the custom to exaggerate the profits of fruit farming, a course well calculated to boom the sale of fruit farms and the sale of nursery stock, but otherwise not in the interest of the fruit industry. Quotations of exceptional profits encourage large plantings, cause increased competition, and often lead to overproduction and to consequent disappointment. A few years ago, for example, an acre of plum trees near Winona, in the Niagara district, was said to have given the owner the enormous gross income of \$1,000 in a single season! Forthwith it was claimed that a plum orchard in that district might be expected to yield an income of \$1,000 per acre! As a consequence, immense orchards of plum trees were planted in many parts of the Province. I leave it to the readers of the "Farmer's Advocate" to say whether it is doing justice to the fruit industry, or is fair to the public, to give such instances as showing the probable profits of plum culture.

Only last autumn an instance of exceptional profits in apple-growing in the Annapolis Valley, Nova Scotia, was heralded far and wide. An orchardist there in 1903 claimed to have received at the rate of \$500 an acre from his apple orchard. Is that a fair example to give the public of the probable receipts from an apple orchard? Is it not rather most misleading? I cannot understand the object of such publications, except for the purpose of booming the price of land.

I am not pessimistic; on the other hand, I have ever been most enthusiastic over fruit culture, devoting my whole farm to it, and making it my life work. I have met with great disappointments, in view of the increase of fungi and insects during the last thirty years, and the great shrinkage in prices.

Last year I think I was more than usually dissatisfied with the sales made for me by commission agents. In one case, for example, I placed a large consignment of the finest Bartlett pears, packed in half-bushel cases, with a certain commission merchant, asking him to hold them in cold storage for advanced prices. Either because he had Bartletts of his own to put out first, or else from sheer neglect, he did not offer these pears for sale at the proper time, and reported me the sale at four cents a box! Nor is this the first instance of similar results from fruit, so consigned to other houses in other cities. Does it not look like a combination to prevent the grower from getting the high prices?

I have still faith in the future, but in our own best interests I contend that we should own up to the dark as well to the bright side of our industry, and ask ourselves how we can best meet and overcome the present unsatisfactory situation.

SOME SUGGESTIONS.

Now let me touch upon one or two means of reaching improved conditions, which may at least serve to provoke discussion among experienced fruit-growers. The keynote to the whole thing is, of course, co-operation; and first we must unite over methods of sale. No other people on earth sell their goods so foolishly as the fruit-growers. They ship in the dark to a market about which they know nothing (it may be bare or it may be overstocked); they do not even put a minimum selling price upon their goods, but instead leave the price-making to the buyers, whose interest it is to make it as low as possible. Is that business? Is it not rather the height of foolishness? And is it any wonder that we sometimes get barely enough returns to pay for baskets and for picking? Surely, after the experience of the past season, even the most cranky fruit-grower will be ready to cry out in favor of a union of fruit-growers, representing all local organizations.

2.—We should agree on a minimum price for each fruit for the season. This much is surely an easy possibility. If tomato-growers can agree on a mini-

mum price of 25 or 30 cents a bushel for tomatoes as the price for the season, why cannot peach-growers agree that XXX yellow-flesh peaches, for example, shall be worth for the season a minimum price of 2 or 3 cents a pound, f.o.b., and white-flesh, 1½ to 2 cents a pound? Why cannot the grape-growers agree on a minimum wholesale price of black grapes and white grapes for the season, of say, 1½ cents a pound, f.o.b., and of red grapes of 2 cents a pound? If selling agents are agreed upon, they would be instructed a long time in advance of these prices, and asked to take orders for as many pounds as possible early in the season at these prices.

3.—We should seek to unite in co-operation with all present organizations, so as to make as little new machinery as possible. The Ontario Fruit-growers' Association, under Government patronage, is just now forming local fruit-growers' associations in every part of the Province, which are to send representatives to the annual meeting in Toronto in November of each year. Why should not this association, being so representative, do something toward developing the business side of our industry?

4.—The Niagara District Fruit-growers' Stock Company has been a long time in operation, and has an extensive list of agents who are responsible men. They already have a splendid business organization. Perhaps they would adapt their methods to our needs, and have their agents solicit personal sales in advance of shipments, agreeing not to offer at any time any goods from any source below the minimum price agreed upon, providing at the same time that all large growers would agree not to compete with them by shipping to other dealers in the same town, unless it be on f.o.b. sales, not less than the minimum wholesale price agreed upon.

5.—We need to unite over the price of labor. Every year the workman has been asking a little advance. First it was \$1.00 per day, then \$1.25, then \$1.50, and now some are talking \$1.75. This comes in part from want of a union of employers. If we agreed upon a

Fall Pippin and Early Harvest and Snow apples that always spot, when you can as well top-graft them to Duchess, Gravenstein, Blenheim, Wealthy and Baldwin—varieties that are seldom affected? And so on through the whole list. It is to assist growers in this particular line that the Department of Agriculture has established the Ontario Fruit Experiment Stations, the reports of which are from year to year of increasing value.

8.—We must plant with a view to the export trade. Our home markets are already glutted; but there is room abroad for all we can produce, if we grow those things that will carry. And just here is one great advantage to be gained by a local union of fruit-growers. The members of such a union should agree upon planting those varieties which will export well and bring top prices; and they should plant or top-graft their orchards with these varieties. The union will then be able, after a time, to put up car lots of a single variety, packed in uniform grades, and to export this variety with a handsome profit. Take the Bosc pear, for example, or the Howell, or the Louise, or the Pitmanston, and there is no limit to the quantity that can be exported to Great Britain, with a certainty of profitable returns. Any one of these could be very wisely selected as the export pear for any local union, and all present trees could be top-grafted with it. It would not be long before the members of such a union in Ontario would find themselves making money quite as fast as any California growers. To bring the best results, such pears should be graded to size and quality, and carefully wrapped and packed in the half case, measuring inside 5x11x20 inches.

9.—We must use uniform packages. To this end the Ontario Fruit-growers' Association, at a recent meeting, proposed that the apple box for Ontario measure, inside, 10x11x20 inches, and now, after a year's satisfactory trial, I notice that the Hon. Sydney Fisher has fixed this as the legal standard apple box for the whole Dominion.

10.—We must have perfect cold storage for the export of fruit. That this is imperfect in some important link, I am satisfied, because of my frequent failure in the export of Bartlett pears, which so often reach Glasgow in an overripe condition, no matter how green and hard packed. Besides, I have found that packages of the same fruit, picked and packed in the same condition, and held in cold storage in Ontario until after the sale of those shipped to Great Britain, were still firm and hard.

We should be able not only to export our best pear, the Bartlett, but also our best peach, the Early Crawford. If we could export this peach with success, and get for it the English price of \$3 and \$4 a bushel, we would say no more about unprofitable fruit farming.

The accompanying letter from an Australian firm just to hand, shows a fine opening for both our apples and pears, if we can obtain cool air space on the steamers between Vancouver and Sydney.

Surely the problem of successful fruit-growing is not beyond solution. Surely the conditions laid down in this paper are none of them very difficult of attainment by a set of men whose pockets are so deeply concerned as those of the Ontario fruit-growers.

LINUS WOOLVERTON,
Secy. Ontario Fruit Experiment Stations.

APIARY.

Fruit Injured by Crickets, not Bees.

By Morley Pettit.

H. Garman, Entomologist and Botanist of the Kentucky Agricultural Experiment Station, has a bulletin on an injury to fruit by insects and birds. The skins of ripening grapes, peaches and plums were frequently found to be cut by some unknown agent. Brown rot set in in some cases, and in others bees carried off the juice of the fruit, and received the blame for having cut the skins. In September, 1904, Mr. Garman conducted experiments, and made observations which prove conclusively that in spite of the effective manner in which they use their jaws against robbers and in cutting the caps of cells, the bees were not responsible for breaking the skins of this fruit.

It was observed that plums that were perfect in the morning remained so at night, and no matter how close a cut plum hung to a sound one they never touched the latter. To test them, he more than once removed cut plums from clusters, thinking that when they found their forage gone they would cut the next plum. They returned again and again, circling through the vacant space, but in no case did they show the slightest disposition to attack the other plums. Then he began to take paper sacks from plums that had been enclosed to protect them from rot. These plums generally came out of the sacks in perfect condition, and when exposed in the morning remained perfect the following evening. But the next morning some of them were generally with small, fresh-cut holes in their skins, and the bees soon came to them.

This led to the conclusion that some nocturnal insect was the culprit, and on the night of September 11th, Mr. Garman observed snowy tree-crickets (*Oecanthus nivens*) cutting holes in plums. Peaches were found to be attacked in the same way. Two nights later, Mr. Garman



Mr. Henry Grose, Lefroy, Ont.
President of the Dominion Grange.

proper scale of wages, there would still be the same number of men in the section, and they would be more settled. If you consult the report of the Bureau of Statistics, you will find that farm labor, though it has advanced in value, is not nearly so much advanced as our workmen would have us think. Two hundred and fifty dollars a year, to two hundred and seventy-five, with certain privileges of house and firewood, and perhaps a garden, is about the average throughout the Province for yearly engagements. But our fruit-growers, liberal souls, who are making so much money out of fruit farming, are paying \$300, and in some cases \$350 a year, with the said privileges. Will our business afford such wages? Anyway, I think we should agree on a maximum, instead of competing over each other's workmen. We can secure men from outside without advancing the scale of wages, if we properly advertise our need of them.

6.—With the present high rate of wages, we should work smaller fruit farms. The twenty-five acre man can make far more money in proportion to his investment, than the fifty-acre man. He can handle it all himself, and save the \$500 or \$600 of the solid cash that would otherwise go in wages.

7.—We must grow only the best varieties. I do not believe there is a man of us who does not grow a large amount of inferior fruit, for which he gets second-rate prices. How many poor varieties of pears, of peaches, of cherries, of apples, etc., are there in every orchard? If those Triumph, Louise and Longhurst peaches do not pay as well as Yellow St. John, Crawford and Elberta, why it is high time to root them out, and to plant the latter. And the same rule should apply to all fruits. Why grow Yellow Spanish, Rockport and Elton cherries, which always rot, when you can have clean, rot-proof Cleavelands, Knight's Early Black, Reine Hortense and Montmorency? Why grow

examined a bunch of Concord grapes, from which a sack had been removed during the day, and found a cricket cutting a hole in the skin near the stem of the grape. When captured, it proved to be *Oe. angustipennis*.

Here, then, was the solution of the puzzle. The crickets were cutting the fruit. The honeybees were simply following them. This is but added testimony to the fact that honeybees do not cut the skin of fruit. Elaborate experiments were described in the Rural New Yorker a few years ago, and were repeated at the Central Experimental Farm, Ottawa. In these the bees were confined in a room without food, and fruit of various kinds exposed in the room. They would run over the fruit until it was polished, and whenever the skin was broken, would go in and devour the contents, but rather than cut the skin would die of starvation.

NEWS OF THE DAY.

Canadian.

Mr. E. F. Clarke, M. P., of Toronto, one of the foremost politicians of the country, died on March 3rd from heart failure, following pneumonia.

The Dominion Minister of Railways has announced plans for improving the terminal facilities, docks, etc., of the Intercolonial at Halifax, by an expenditure of \$1,000,000.

Messrs. H. and A. Allan, of Montreal, have signed a contract with the Dominion Government for a steamship service to France. The contract has been drawn for three years, and four vessels, the Laurentian, L'omeranian, Sardinian and Buenos Ayrean will be employed. Each will be fitted with cold storage. Preference will always be given to Canadian shippers, against whom there will be no discrimination in freight rates.

A big power plant is to be established by the Edison Sault Electric Co. on St. Mary's Rapids, near the "Soo" locks, in the immediate future. It is estimated that \$120,000 will be spent on the plant during the coming summer.

The County Council of Halton, Ont., has decided to erect a house of refuge for the poor of the county.

The naval station at Esquimaux has been formally abandoned, and all naval departments of the station have been closed.

Experts have expressed the opinion that the oil fields known for some time to exist in Alberta may prove to be among the richest in the world.

British and Foreign.

All the universities and colleges of Russia have been temporarily closed by the authorities.

Sir Henry Irving, the famous English actor, has collapsed from overwork. He is nearly seventy years of age.

A serious revolt against the Turkish Government has broken out in the Province of Yemen, Arabia.

The Earl of Selbourne, First Lord of the Admiralty, will succeed Lord Milner as British High Commissioner in South Africa.

The British Government will spend \$166,945,000 on warships this year. The programme includes one battleship, four armored cruisers and five ocean-going torpedo-boat destroyers.

A convention of workmen, remarkable in that at it, for the first time in their lives, the delegates met with freedom of speech and assembly guaranteed them, was held at St. Petersburg, on March 1st. The convention unanimously adopted a resolution, demanding the release of the workmen who have been arrested since January 22nd, and that, at future assemblies, the right of freedom of speech and liberty of the press in regard to all transactions be assured.

The situation in the Caucasus now practically amounts to civil war, the greatest disorder reigning at Baku, Batoum and Tiflis, where riots and assassinations occur daily, the troops being entirely inadequate to meet with such atrocities. In Poland the strikes on the railways have ended, but practically the whole Province has been declared in a state of siege, and is now governed under a form of martial law.

The piercing of the gigantic Simplon Tunnel through the Alps, between Switzerland and Italy, marks another triumph in engineering. The work was begun in 1803 by two parties, one Swiss, the other Italian, working from opposite sides of the mountain, and so accurately was the advance gauged that the parties met exactly, the throwing down of the last barrier forming a continuous passage, twelve miles long, through which

trains will be run as soon as practicable. Among the many obstacles encountered while carrying on the work the most serious were hot springs, which so heated the atmosphere at times that work had to be discontinued until means of cooling it were found.

The decision of the International Commission of Inquiry into the North Sea incident was publicly announced in Paris on February 25th. It has been definitely proved that there were no torpedo boats in the vicinity at the time of the catastrophe, and Admiral Rojestvensky has been censured for his precipitancy in ordering the guns to be fired. At the same time, it is acknowledged that he acted under the mistaken idea that the trawlers were really torpedo boats, the Russians having been advised that such an attack was likely to be made in the vicinity. Russia had agreed in advance to indemnify the Hull fishermen, and the question of punishment or reprimand will be left in her hands. The expenses of the commission were estimated at \$150,000.

Fighting of the most desperate character has again been reported from Manchuria, and once more comes the news that Kuropatkin is about to retreat northward. His position has, for some days, been not unlike that which he occupied before the retreat at Liaoyang, the Japanese having crowded upon him on three sides, so that his army lay in the form of a wedge, with Pouteloff Hill, where the fiercest bombardment has been raging, at the small end of the wedge. The news now comes that the right wing has been rolled back from its position, and an unconfirmed despatch states that 250,000 Japanese have broken through the left wing, and that, consequently, Kuropatkin has telegraphed to the Czar that he is in extreme danger. However that may be, the fact remains that the Japanese are within six miles of Mukden, and the impression is general that Kuropatkin has again sustained a crushing defeat. The carnage during the past six days has not been equalled at any similar time in the war, the number that has fallen being estimated at 100,000 men. Japan's next move will probably be to close upon Mukden, which the Russians are making a desperate effort to retain.

THE FARM BULLETIN

Malcolm McF. Hall has been appointed Manager of Halifax Exhibition, to succeed J. E. Wood.

Seeding is in progress in the warmer sections of the Canadian Northwest.

The surest way to make a profit is to keep down the cost.

Dr. Oronhyatekha has resigned the Presidency of the Farmers' Co-operative Harvesting Machine Company, Limited.

The County Council of Victoria has passed a by-law adopting a county system of roads, and will raise \$100,000 to commence improvements on the 200 miles of roads to be taken over.

Another party of students from the Argentine Republic is to attend the O. A. C. at Guelph, Ont. The number has, however, been limited to six by the Argentine Government.

Mr. Corby Bromfield, who has been in Canada investigating trade conditions for an English firm, has expressed the opinion that there are great opportunities for English manufacturing establishments to set up works in the Dominion. Let them come. The more the merrier.

W. A. Badger, Bellefontaine, Ohio, writes us as follows: "I see on page 159, issue of 2nd February, what Mr. Alex. Dunn says about 'Plank Barn Frames.' He is away off for this country. There are more such new barns built here now than of any other style, are stronger, and better every way."

The Superintendent of Public Instruction in Iowa, after a careful study of the question, has reached the conclusion that pupils in consolidated schools enjoy better privileges and are taught by better teachers than under the old district plan, and that besides these advantages the slight additional cost which transportation of the pupils involves is a small matter.

John Shields, Shelburne, Ont., the owner of what is known as the Shield's meteorite, which fell on his farm on the 13th of August last, sold it to Oliver C. Farrington, Ph. D., Curator of Geology in the Field Columbian Museum, Chicago, for the sum of \$500. Mr. Shields is to be furnished with a cast of the meteorite and a small portion of it.

"The plan of keeping the poultry-house warm during the winter is all right up to certain limits, but there is no necessity of keeping it without ventilation. Just as some of the worst colds are caught by human beings from being in rooms too warm, so are some of the worst cases of roup among poultry traced directly to over-warm houses."—[Farm-stock Journal.]

A deputation from the Ontario Fruit-growers' Association waited on the Hon. Nelson Monteith, Minister of Agriculture, recently, with the request that the Ontario Agriculture Department conduct a series of experiments in the Niagara district, in order to ascertain the best method of combating the San Jose scale, and its effect on grapes.

Our English Letter.

If we had had the making of our weather, we could hardly have had a more favorable winter for agriculture than the present one of 1904-5. Consequently, the plowing was never more forward, and the frosts we have had provide a beautiful seed-bed. Many farmers, indeed, seized the opportunity to put in their seeds before the middle of February. The lambing season is now well on in the west and south of England, and, judging from reports to hand, and also from my own observations, the results are altogether satisfactory. For the moment, indeed, "every prospect pleases."

The Argentine wheat crop is now reported as likely to be ten per cent. less than last year, and in Australasia it is probable that the exportable surplus for Europe will not exceed 1,500,000 qrs., as compared with 4,000,000 qrs. last year. This means that the shipments, which from January 1st to June 30th, 1904, averaged 100,000 qrs. per week, may not exceed 50,000 qrs. in the same period this year. Russia is the "dark" horse at present, and the Indian crop, on which so much depends, would still appear to be in a somewhat doubtful state in certain parts owing to very severe weather. For the moment, therefore, the wheat market presents many interesting features.

In the flour trade, it cannot be said there is any improvement in prices, but there has certainly been a better demand generally. There is a good enquiry for strong American patents, but these remain almost unobtainable, although some "blank" sellers are accepting rather low prices for forward delivery.

In maize (corn), firmness in La Plata and weakness in new American corn continue to be the prominent features of the market. La Plata landed makes \$5.58, and mixed American only \$4.98. Buyers do not, apparently, like the condition of American maize this season, hence the comparatively high price obtained for sound La Plata corn.

Although the cattle trade has not been up to the mark for some time, prices had been well maintained. In Smithfield market, despite the fact that United States chilled beef has been in very moderate supply, prices show a material decline. Argentine chilled beef has been fairly plentiful, but some recent consignments have arrived in indifferent condition, and a few quarters have been condemned. The quality of the meat is, however, excellent, consisting principally of young, well-finished beef. A trial shipment of live sheep from the Argentine has reached Antwerp, where the sheep were slaughtered and the meat sent on to the London market. The price realized is reported to be 11½c. to 12c., and these figures will probably lead to further shipments.

Cheese—The demand is not brisk, yet the trade may be described as steady. Some Canadian cheese of faultless quality was sold at 11½c. for colored, and 11½c. for white. A nice shipment of 4,760 packages cheese has been landed this week from New Zealand, and has met with a good reception, is of excellent quality, and said to be in better condition than some of the Canadian product.

The market for apples has been dull. U. S. fruit has been sold at the lowest price this season. Canadian fruit has, however, done rather better, particularly for Golden Russets, for which there is a continued good inquiry. The prices range from \$2.90 to \$4.30 for Canadian apples. London, England.

To Fight Weeds.

Prof. L. H. Bailey gives the following rules for keeping down weeds, and thereby improving crops:

First—Practice rotation. Certain weeds follow certain crops; when the weeds get too strong, change crops.

Second—Change the method of cultivating. Plow deeper or shallower, or use a different harrow or cultivator.

Third—Cultivate frequently with light surface tools.

Fourth—Sow clean seed.

Fifth—Don't let weeds run to seed on the manure pile or anywhere on the farm.

Sixth—Hogs and sheep will clean up the weeds on foul fallow land. It is said that a weed will not germinate after a sheep has dropped it.

Old-timers.

Have read your valuable paper, the "Farmer's Advocate," for ten years, and I think it is the best paper a farmer can take.

Grenville, Ont. W. H. LATOURELLE.

I have taken the "Farmer's Advocate" for about twenty years, and find it all right.

Oxford, Ont. WM. FRIZELLE.

Have subscribed for your paper eighteen years and would not be without the "Farmer's Advocate" for double the amount.

W. G. HENDERSON.

Cost of Production.

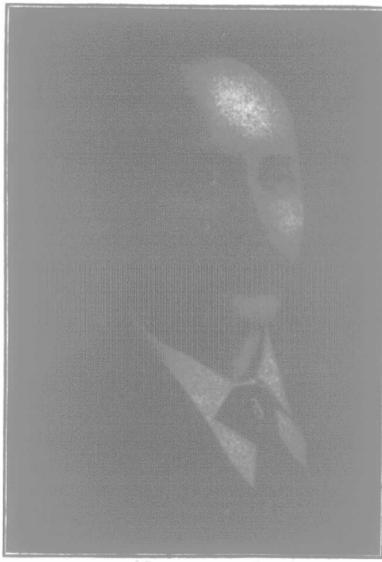
To the Editor "Farmer's Advocate":

A letter in the February 9th issue of the "Farmer's Advocate," with the above caption, must have attracted the attention of many of its readers, as it was apparently issued as a rider to my letter of the same issue. In the first place, the writer cites the opinion of the student of political economy in regard to wealth and values. It is one thing to state an hypothesis, but it is a different thing to conclude its truth. What will my esteemed critic say in regard to the present position of the British manufacturer? Is he not producing vastly more than is wanted for home use? Are he and those dependent on him as prosperous as half a century ago? Has he not had the trade and experience for centuries, and, therefore, should he not be fully conversant with the economics of his business? But, alas, what has his overproduction done for him? The assumption as to values may be regarded as containing a shade of truth, particularly in the latter expression, "to the advantage of the producer." The anxiety of one community to outdo their neighbors leads them to cut prices in doing so, to capture the market on some staple article, where the competitor may, by being so climatically and geographically situated, produce such article at a less price than his less fortunate neighbor, who has to battle climatic conditions and face a long transport haul. And the competitors of the latter class are expected to place their article on the market at the same, and in many cases, even a less price than the "God-favored." I can understand why some product of manufacture can be produced much cheaper in one country than in another, because the raw materials of its composition lie side by side, practically, at the place of its construction. But why should farm produce be forced into the competitive markets, on the same plan as is the stock market? Is it not for the express purpose of throttling the farmer and of gambling? The speculator in farm produce is not much better than the stock gambler, and goes about his work with the same subject of shearing the lambs. But why farm produce, brought about in exactly the same way and methods, should be so diverse in price, even in each country's home markets, let alone in the foreign competitive market, is a question that should receive some share of attention. For if we cannot put to best advantage what is at home, how can we go abroad to do it? The writer claimed that coal oil was an article of the favored class. Then, what about the iron trust, salmon-packing amalgamation, the leather and shoe combine, many implement combines, the cotton-growers' "cotton pool," and the present sugar situation? Now, don't be partial; give each your consideration. What has been feasible and workable with these should be equally so with the farmers' produce. And I am not so prone to hug delusions as my friend is to argue against common truths. Would he, if he were in the publishing business, when he knew it cost him \$1.50 per annum to produce papers for the weekly issue to his subscribers, continue to issue it at \$1.00 per annum? Now, why should he not, using his argument that wealth is the extra production of an article produced cheaper? Do we frequently find such generosity, or do we find those who preach the gospel of economy rarely practice it? We find their avarice just as unbound as his humble servant. I would not assume to dictate to a master builder, where he could buy cheaper, or use his materials to better advantage, because I am not versant in his business. Besides, he might think me just a little out of place. The farmer is willing to hear advice, but, like the builder, he knows where the articles fit, and will shape things in his own plan. Who decries as impossible the idea of bettering our position upon the competitive market? To him I say nothing is impossible, for he must admit that what were listed as impossibilities, even ten or twenty years ago, we are enjoying the full benefits from as realities to-day—talking great distances, wireless telegraphy, and even flying. There is a grand future in store for the farmer, as well as for the other classes of humanity who are struggling, and who have struggled, for reforms that are as essential as their existence. Would our esteemed friend wish to see the Canadian farmer in the relative position of our peasant friends of Russia? When he so decries our possible future hope or attainment, he certainly must have some of that element infused. The farmer as a down-trodden, despised, buffeted being, I am glad to say, is fast becoming a person of the past. But where is the farmer to expect substance to come from the shadow markets of to-day? Is it to come by our continued overproduction, or will that not be like adding more coal to the fire, only to cause the greater shadow? Think! Yes, I say think! I would like the writer to indicate the place and person wanting that 25-cent butter, and he can have plenty of that sweet, gilt-edge product of the Canadian farms that would tempt the appetite of an epicure. The reason our markets are in the fifteen-cent class is not that the butter was originally worth no more, but the speculator, who is after the large margin,

holds it off the market till its quality has deteriorated.

Again, much of the second and third class butter that would find a fair value in the cooking class is forced to displace much of the A1 article, thus lowering its price, because the oleomargarine competition displaces the second and third class butter in the legitimate markets. "The holding-in-storage system" to which many of our speculators resort, in order to increase the margin, has a disastrous effect on the producer in the end, and he is blamed for poor quality, instead of those who have largely to do with it. That an improvement can be made in the selling of our butter and cheese goes without saying. The greatest loss we meet in these commodities is from the system of cutting practiced by most buyers of these articles, and the system in vogue of Montreal inspection and weights. Many unscrupulous men have no compunction in decrying goods, even when faultless, thereby reaping reward for their avidity, to the exasperation of the producer. Why, then, should the farmer be the only person to practice economy? Let some of the others do their part, and if a loss must be suffered, let all who are party to it lose. But here does the old saying come true, "The farmer speeds them all."

Let us turn the searchlight on the bacon industry as a subject. I have stated in my former letter, from experience in the business, that to cheapen the cost of production is an impossibility, even by practical method. I was, however, pleased to see how the letter of so reliable a person as Mr. J. H. Grisdale, in the "Farmer's Advocate" of February 2nd, dealing with the subject in a different way, proves conclusively what bacon costs per one hundred pounds gain, being \$4.38 for actual grain feeding on a ninety-day test. What did the pig cost up to the start of



Alex. McFarlane, Otterville, Ont.

Secretary-Treasurer Ontario Association of Fairs and Exhibitions.

the test at seventy-five pounds weight? What about the labor, the wear upon the building? Should these sink from view when costs are to be considered? This same reliable source of information deals at length with the "beef question" on the same page, also proving my assertion that these commodities cannot be continued to be placed on the market, even at present prices. Therefore, how can we be expected to place them there at less, when we are now losing at the present quotations?

Those who urge the cheaper production must see its fallacy conclusively established. The idea of producing the bacon for the live market prices that prevailed all winter, until a few days ago, four cents to four and one-half cents per pound for prime selects, with grain at the market price from forty cents to sixty cents per bushel, and by-products from \$1.05 to \$1.50 per one hundred pounds, besides labor, etc., should be reasons sufficient to banish the hog till such time as those engaged are paid for their work, with a margin for their investment. Ask the packing companies for their quotations. Go to your local grocer and butcher and ask them the price of breakfast bacon, and you may be surprised when you learn it is sixteen to eighteen cents per pound. In the name of all reason, where did that ten to thirteen cents become added to the farmer's prices. Now, be frank! Don't you think that the people who have had the easy part have got a little too much for their part of the work? The consumer here is made to suffer with the producer, but the farmer is getting the blame that others deserve. And why should any particular community be compelled to bow down in slavery to grant some

favored class an advantage over the rest of struggling humanity. The producer does not expect impossibilities, he simply desires to be recognized as a unit in the progress of the world, and expects his reward, for is not the laborer worth his hire? We don't want the whole earth, nor to throttle the inhabitants thereof. Much less would satisfy the most ambitious. Another phase of the question is here apparent. Those versant in the industry will tell you that fully forty per cent. of the trade are listed as culls, selling at the high figure of from two to three cents per pound, and from these are made select barrel meat, cured hams, sausage and pressed ham, selling at from ten to fourteen cents on the local markets. Someone says: why raise these culls? Well, if these were not raised where would the sixty per cent. bacon selects come from? The sires and the sows must be kept or the trade must go. And I think right here there is room for some measure of reform, and consequent compensation to the farmers. Again, the by-products are at present above true feed values, if the beef and bacon producers are to remain in business, and get any margin. They, many of them, such as bran and shorts, are indispensable, but we cannot take them at current values and return a profit.

It appears to me that the farmer's position to-day is like that of the horse that ran short of hay in December, and was told by his sympathizing owner, "Now, Charlie, if you can just live till spring you shall have plenty of grass, and nothing to do but eat it"; but spring came, and the horse was not. It was then only that poor Charlie was appreciated, and his true worth was known. Awake, Bro. Farmer, shake off your slumbers, for now is there plenty to do to better our position.

Thanking you for so much of your valuable time and space.
Grenville Co., Ont.

J. D. WYLIE.

Hereford Breeders' Association.

A special meeting of the Canadian Hereford Breeders' Association convened at the Rossin House, Toronto, February 16th, 1905, for the purpose of considering the advisability of making their association and records national. R. J. Mackie, president, occupied the chair. He spoke briefly as to the benefits to be derived from having national records, and called upon Mr. F. W. Hodson, Dominion Live-stock Commissioner, who outlined the scheme of nationalizing the records, which the members approved, and on motion of M. Copland, seconded by M. H. O'Neil, it was resolved:

"That the Canadian Hereford Breeders' Association at once proceed to nationalize their association and records; that the office be transferred from Toronto to Ottawa; that J. W. Nimmo be Registrar, and R. J. Mackie, W. H. Hunter and W. H. Hammill be a committee to meet with the Live-stock Commissioner and complete arrangements forthwith."

Mr. O'Neil said there were a number of herds of Herefords in Canada which were not recorded in the Canadian book, and he thought the association should try and make some inducement in order to get the breeders to record in the National Record. This was the general opinion of the meeting, so R. J. Mackie moved, seconded by W. H. Hunter:

"That the Registrar be authorized to issue a circular, stating that all American pedigrees now in Canada, shall be re-registered in the Canadian book at cost price, and that this condition shall prevail until the 31st of December, 1905."—Carried.

W. H. Hammill moved, seconded by W. H. Hunter: "That the Canadian Government be and is hereby asked to take steps to regulate the further importation of horses, cattle, sheep and swine."

"And it is hereby further resolved, 'That animals for breeding purposes be admitted free of duty when pure-bred, registered in the authorized book of records of the Dominion of Canada, or of the country in which the breed originated, and when owned by a bona-fide resident of the Dominion.'"

Dates Claimed for Public Sales.

- March 14th.—Imported Clydesdales; Repository, Toronto.
- March 15th.—Jersey cattle and Cotswold sheep; W. G. Laidlaw, Wilton Grove, Ont.
- March 16th.—Clydesdale mares and fillies; Nelson Wagg, Claremont, Ont.
- March 16th.—Shropshire and Dorset sheep; H. A. Hanmer, Mt. Vernon, Ont.
- March 17th.—Shorthorn cattle, Clyde mares, Oxford sheep; Geo. Ferguson, Salem, Ont.
- March 21st.—Shorthorns; Goodfellow Bros., Macville, Ont.
- March 22nd.—Shorthorns and Clydes; W. G. Howden, Columbus, Ont.
- March 22nd.—Ayrshire cattle; Messrs. Ogilvie, and R. Hunter & Sons, at Lachine Rapids, Que.
- March 22nd.—Shorthorns; W. G. Howden, Columbus, Ont.
- March 23rd.—Shorthorns; Geo. H. Johnston, Balsam, Ont.
- March 29th.—Hackneys and harness horses; R. Beith, Bowmanville.

Western Farmers and Stockmen in Convention.

During the last of February a number of Western agricultural and live-stock organizations held their annual conventions in Winnipeg. On the 21st were the conventions of the Manitoba Horse-breeders' and the Manitoba Cattle-breeders' Associations. The Manitoba Beekeepers' and Manitoba Veterinary Associations had their turn on the 22nd, the Manitoba Sheep and Swine Breeders on the 23rd, the Manitoba Dairy Association on the 24th. During the week, also, the Winnipeg Exhibition Board met, the Manitoba Poultrymen held a show of birds, the special meeting (reported elsewhere in this issue) of Shorthorn breeders met at the call of E. R. James, Rosser, director representing Shorthorns in the Cattle-breeders' Association, and the city of Winnipeg tendered its annual banquet to the visiting stockmen. The Alberta poultrymen had met and held their second annual show February 15th to 17th.

The cattle-breeders' meeting was a busy one. The secretary, G. H. Greig, presented the financial statement, showing receipts of \$483.48 and expenditures of \$401.90. He called attention to the large number of poor thin cattle that had been marketed from the ranges last fall and during the winter. These cattle have a most depressing effect upon the prices of better cattle without cheapening the cost of meat to the consumer, which conditions emphasize the necessity of establishing the dead-meat and packing business on a better basis. It was pointed out to the convention that the previously existing arrangements, whereby the Territorial Government had transported pure-bred stock from Manitoba to the West at a nominal fee, had been abrogated, and that if the Manitoba cattlemen would capture a larger proportion of the Alberta trade, the Cattle-breeders' Association would have to take some action in the matter, as the Ontario Live-stock Associations were receiving large grants to enable them to transport to the West stock which comes into direct competition with that bred in Manitoba. This question, although an important one, was not acted upon by the convention.

A discussion relative to the restriction of the importation of Mexican cattle was then conducted, and a resolution passed which read as follows:

As the importation of Mexican cattle has flooded the ranges of the Canadian West with a class of very inferior merit, from packers', consumers' and breeders' points of view, and whereas the Department of Agriculture is spending money with a view to improvement of Canadian cattle, so that our cattle may capture the British market, and whereas the dumping of such inferior stock is a serious hindrance to the cattle-feeding business; therefore, be it resolved, that the Minister of Agriculture be requested to formulate some measure whereby this dumping of inferior animals to the detriment of the Canadian live-stock breeding industry be stopped.

Another resolution was passed calling upon the Dominion Experimental Farm at Brandon to carry on more experiments with live stock, and expressing the opinion that the present plan of seed distribution in three and four pound lots is conducive to the mixing and deteriorating of varieties, and that the expense of distribution and growing of such small samples is out of all proportion to any benefits that might be attained.

On the morning of the 22nd, the convention took up the question of nationalization of the records, and, after discussion, passed a resolution to the effect that the Live-stock Associations of Manitoba are in hearty accord with the proposal to nationalize all the live-stock records of Canada, believing that such will assure equitable treatment to all the provinces, and that such nationalization of records will work out to the betterment of the pure-bred live-stock interests of Canada.

Another resolution was passed, asking the Canadian Government to take steps to regulate the importation of horses, cattle, sheep and swine, and to admit duty-free such animals as were pure-bred and registered in the authorized book of Canada, or of the country in which the breed originated, when owned by a bona-fide resident of the Dominion.

Officers for the ensuing year include: President, J. G. Barron, Carleton Place; Vice-president, A. Graham, Roland; and Secretary, Hon. W. Clifford, Antrim.

The dairymen received a satisfactory financial report, and were encouraged by the assurance that, although the sale of creamery butter had fallen off by about fifty per cent, the prospects for next year were bright. The advisability of taking steps to introduce protective duties to arouse more interest in dairymen was discussed. Mr. F. W. Hodson assured them that the milking machine was an assured fact, and would soon be found on all the large farms. Officers elected for 1905 include: President, W. B. Gilroy, Antrim; Secretary-Treasurer, Geo. H. Greig, Winnipeg.

At the Sheep and Swine Breeders' convention, the secretary read a satisfactory financial statement, and noted that the number of hogs were receiving double the number of hogs they did last

year. He regretted that the expense of fencing and the ravages of wolves had so hampered the sheep industry, but with cheaper fencing the raising of sheep would, no doubt, become more popular. The President for 1905 is Dr. S. J. Thompson, St. James.

At the show of the Manitoba Poultry Association the display of birds was large, general-purpose utility breeds being out strong, especially Barred Rocks. At the convention, the advisability of amalgamating with the live-stock associations was considered, Prof. Graham, of Guelph, laying before the meeting the advantages that the poultry associations in the east had derived from such affiliation. The incoming executive was memorialized to do its best to bring about amalgamation. The Poultry and Pet Stock Association of Alberta had a most successful exhibition, which also proved the occasion of an enthusiastic gathering of citizens, fanciers and farmers, who assembled at the night meeting following the second day of the exhibition.

The beekeepers passed a resolution deploring the presence in the markets of much adulterated honey, and asking the Government to look into the matter, with a view to protecting the home market and consumer. The president for 1905 is S. A. Bedford, Supt. Brandon Experimental Farm; Secretary-Treasurer, Thos. Gilley, Winnipeg.

At the Board meeting of the Exhibition Association, held previous to the annual meeting, the resignation was received of President J. T. Gordon and Manager F. W. Heubach, on account of pressure of private business, the latter retiring after ten years' service. By way of appreciation, he was granted a bonus of \$1,000. The financial statement showed that 1905 was a successful year for the Association, after paying a previous year's debt (bank overdraft, 1903, \$2,413.84, and bills payable, 1903, of \$10,000) of \$12,413.84, and some \$3,000 of accounts from 1903, have a balance of \$3,508.39. The city of Winnipeg's outlay on the buildings for the Dominion amounted to about \$55,000. The attendance during the ten days was estimated at 209,000. It is now proposed to utilize the exhibition grounds as a public park, to be kept up by the city, a most commendable idea.

Trashy Food and the Farmer's Market.

It is a question if farmers in counting their blessings put as much emphasis as they should on the fact that, to a greater extent than other people, they "know what they are eating." With one's own milk, butter, cheese, meat and fruit there is little chance of being victimized by the sharks who are ready to cram anything from boiled moccasins up, down the throats of the gullible. The sale of such "preparations" is, however, damaging to the farmer, in that it spoils his market for good honest productions. Farmers who have fruit to sell will be glad to know that, as has been announced by the Minister of Inland Revenue, a vigorous campaign is about to be instituted against several varieties of adulterated foods, among them so-called jams and jellies, which, put up in nicely-labelled glasses, have been passing for raspberries, strawberries, etc., etc., when, as a matter of fact, there might not be a particle of raspberry or strawberry in them, the "lack" being made up by glucose, aniline dye, salicylic acid and boiled hayseed, with a little apple pulp and flavoring. The bulk of the adulterated foods of this description has been shown to come from the United States; the English jams, on examination, proving to be invariably pure. One method of lessening the evil suggested is that a special duty be imposed on all such canned "goods" coming from the United States. Something should certainly be done, and that quickly. There should be no room for frauds in Canada.

Death of Mrs. Henry Arkell.

The many friends of Mr. Henry Arkell, of Farnham Farm, Arkell, Ont., near the City of Guelph, will regret to learn of the death of his estimable wife, which took place on February 23rd. Mrs. Arkell, whose maiden name was Jessie Macfarlane, was a daughter of Capt. D. Macfarlane, of Parry Sound, and was born on July 20th, 1859, in Morriston, Wellington County, where the early years of her life were spent, only a few miles from Arkell. On September 27th, 1877, she was married to Mr. Arkell, and two years ago they celebrated their silver wedding at "Farnham Farm." Mrs. Arkell entered heartily into all her husband's business affairs, and was very much interested in his speciality as a breeder and importer of Oxford Down sheep, becoming really an expert live-stock judge. Her kindly solicitude for the comfort and enjoyment of her family and friends shone forth unostentatiously, and her life-work ever told for good in the household socially, morally, and spiritually.

Mrs. Arkell had been a member of Chalmers Presbyterian church, Guelph, for twenty-seven years, and entered into the duties of that sphere of life with great zest, being an active and willing worker therein, striving to do all that lay in her power for the advancement of the cause of Christ. She will be greatly missed by a wide circle of admiring friends, who were wont to prize her hearty welcome and cordial hospitality, but the loss will be more acutely felt by the bereaved husband and sons, in the home that has been saddened by the removal of a loving wife and mother.

Best, Cheapest, and a Stayer.

To the Editor "Farmer's Advocate":

Sir,—I herewith enclose my subscription, \$1.50, for the "Farmer's Advocate," thanking you very much for waiting on me so long. I can say it's the best paper and the most interesting paper for farmers and others that ever came into our house. Who can get it first is the cry when it comes home from the post office. It is the cheapest paper we ever had for the money. We wish to stay right with it. JAMES MARTIN. Peterborough Co., Ont., March 3rd, 1905.

Danger of Centralization.

A correspondent writes: "I notice in your last issue a reference to the proposal to form an Eastern Ontario Fairs and Exhibitions Association, because the main body at the recent annual gathering decided to make Toronto their permanent meeting place, instead of holding occasional meetings east and west, at such points as Ottawa and London. This is one of the dangers of centralization, which also has a tendency to discourage local initiative and enterprise, and to perpetuate office holding in the hands of a few men."

Prize-list, Canadian Horse Show, April 26th to 29th.

We have received the prize-list of the eleventh annual Canadian Horse Show, to be held under the joint auspices of the Canadian Horse-breeders' Association and the Toronto Hunt, at The Armouries, Toronto, on Wednesday, April 26th, to Saturday, 29th. Arrangements have been made with the G. T. R., C. P. R., Michigan Central and T. H. & B., that on all exhibits forwarded to the show full tariff rates shall be charged, but that such exhibits, if unsold and reshipped after the close of the exhibition, will be returned free, upon presentation of the requisite certificate, signed by the proper officers of the exhibition. Return passenger tickets will be sold on the above lines at single fare rates. For further particulars address Henry Wade, Parliament Buildings, Toronto. Entries close April 12th.

Postage on British Periodicals.

Senator Drummond is to be commended for calling attention in the Senate to the almost prohibitive postage levied by Great Britain on papers, magazines and other publications intended for Canada, and the apparent ease and facility with which cheap publications, often merely advertising mediums, find their way into Canada from the United States. The policy of the British post office was referred to as unwise and unpatriotic. The following resolution was adopted, with a view to strengthening the hands of the Postmaster-General: "That the attention of the Government be directed to the local, foreign and Imperial postal charges, with the view of remedying certain inequalities therein, and the Senate affirms the principle that the conveyance of letters, newspapers, books, periodicals, etc., should be at a lower scale of charges within the Empire than at the time ruling with any foreign country."

Billy and I.

They say they are going to shoot you, Old Billy, but don't you fret, For the fellow who dares to meddle with you, 'most reckon with me, you bet; You're a poor old horse, Old Billy, and you aren't worth much, it is true, But you've been a faithful friend to me, and I'll see you safely through.

Shoot Old Billy? I guess not, though you may be old and gray, By the self-same stretch of mercy they'll be shooting me some day; I haven't much love for the fellows who follow the shooting plan; If they had more pity for horses and dogs, they'd have more love for a man.

They tell us that horses have no souls, and they all declare it true; That shows how little they know, Old Boy, and it proves they don't know you; Well, well, 'tis a mighty question, and quite beyond my ken— But the more I know of horses like you, the less I brag about men.

You've been a good horse, Old Fellow, steady and brave and true; You have given us faithful service—done all that a horse could do; You've earned your keep; you shall have it; so live as long as you can— For justice is justice, and right is right, whether it's a horse or a man.

Appreciated all Round.

I must say that your paper is properly named, as it is certainly a "Farmer's Advocate" in every sense of the word, and the Home Department is a magazine of true worth in a family circle.

Leeds, Ont.

MORLEY G. BROWN.

MARKETS.

Toronto Markets.

LIVE STOCK.

Export Cattle—None on the market. Prices are quoted nominal and unchanged. Choice are quoted at \$4.40 to \$4.90; good to medium, \$4.25 to \$4.40; good cows, \$3.25 to \$4.

Butchers' Cattle—Good to choice are quoted at \$4.15 to \$4.50; fair to good, \$3.50 to \$4; mixed, \$2.50 to \$3.75; common, \$2 to \$3; and cows, \$2.50 to \$4.

Stockers and Feeders—Unchanged and nominal. Feeders are quoted at \$2.50 to \$4.40, and stockers at \$1.50 to \$3.40. Calves—Quoted unchanged, at 3c. to 6c. per pound, and \$2 to \$12 each.

Sheep and Lambs—The offerings were cleared up very early. Export sheep are quoted higher, at \$3.50 to \$5.12; butchers' firm, at \$3.50 to \$4.50; grain-fed lambs, at \$6.50 to \$7; barnyards, at \$5.50 to \$6.50; and springs, at \$4 to \$8 each.

Hogs—Unchanged, at \$5.60 per cwt. for selects, and \$5.45 for lights and fats.

GRAIN, FLOUR AND FEEDS.

Wheat—Ontario—The market has an easier tone, with prices unchanged. Red and white, \$1.05 to \$1.06; spring, 98c. to \$1; goose, 90c. to 92c. Manitoba—Winnipeg prices are easier, but no change is made locally in all-rail quotations. No. 1 northern, \$1.12; No. 2 northern, \$1.09; No. 3 northern, \$1.03, delivered.

Mill Feed—Unchanged; \$14.50 to \$15 for bran in bulk, \$17 to \$17.50 for shorts, east and west; Manitoba, \$19 for shorts, \$17 for bran, exports.

Barley—46c. to 47c. for No. 2, 41c. to 45c. for No. 3 extra, and 42c. for No. 3 malting, outside, Toronto freights.

Rye—Dull; 73c. to 74c. for No. 2 f.o.b., outside.

Corn—Firm; Canadian scarce, 45c. to 45c. for yellow, and 44c. to 44c. for mixed, f.o.b., Chatham freights; American, No. 3 yellow, 53c.; mixed, 52c., on track, Toronto.

Oats—No. 2 are quoted at 41c., outside. Rolled Oats—\$4.15 for cars of bags, and \$4.40 for barrels, on track here; 25c. more for broken lots here, and 40c. outside.

Peas—67c. to 67c. for No. 2, west and east.

Buckwheat—Firm; 55c. to 56c., east and west.

COUNTRY PRODUCE.

Butter—The demand is not so active. Receipts are about steady, and prices are unchanged.

Creamery, prints 27c. to 28c. Dairy, tubs, good to choice.....19c. to 20c. do, medium17c. to 18c. do, inferior grades15c. to 16c. Dairy, lb. rolls, good to choice.....22c. to 24c. do, large rolls20c. to 21c. do, medium18c. to 19c.

Cheese—Is quoted unchanged, at 11c. for large and 11c. for twins, in job lots here.

Eggs—New-laid, 22c. to 23c. Fresh are almost out of the market. Lined are quiet and easier, at 18c.

Potatoes—Are steady, and quoted unchanged at, Ontario, 65c. to 70c., on track; 75c. to 80c., out of store; eastern, 75c. to 80c., on track, and 90c. to 95c., out of store.

Beans—Are quoted unchanged, and the market has a firm tone. Hand-picked, \$1.65 to \$1.70; prime, \$1.60 to \$1.65; and under grades, \$1.25 to \$1.50.

Hops—Are quiet, at 32c. to 35c. for Canada crop.

Baled Hay—\$8 for No. 1 timothy, and \$7 per ton for mixed and clover, on track, here.

Seeds—Red clover, \$6.50 to \$7.65; alsike, common, \$3.50 to \$5.50; timothy, \$1 to \$1.50, all f.o.b., Toronto.

Dressed Hogs—Sharp decline; now quoted at \$7.50 for choice light weights, and \$7.25 for heavies.

London Hog Prices.

The Canadian Packing Co. advise that prices paid for hogs at their packing-house, Thursday, March 9th, are: for hogs 160 to 200 lbs., \$5.40 per cwt.; for lighter and heavier stock, \$5.15, an advance of 15c. per cwt. in each case over last week's quotations.

Montreal Markets.

Butter—Receipts seem to be increasing. At existing prices, consumption is not more than half what it generally is. Choice creamery has been sold for 28c., and some very ordinary stock for 27c.

Eggs—Market for fresh eggs has eased off slightly, they being obtainable to-day at 28c. a dozen, as against 30c. to 32c. a week ago. Fresh-laid stock may now be purchased at 28c.; lined and cold-storage are also cheaper at about 20c. a dozen.

Potatoes and Vegetables—Dealers are paying 65c. per bag of 90 lbs. for carloads of best red potatoes, on track, and 67c. for best white. Turnips advanced \$1 per ton this week, and are now selling at \$13, or at 75c. for 50-pound bags. Onions are also very firm, and the tendency is to advance. Red Globe onions are selling at 3c. per pound.

Beans—This market has been most excited of any, probably, prices having jumped fully 30c. per bushel since a week ago. A large dealer stated that he would not accept less than \$1.85 per bushel for prime beans, carloads, on track. Others are, or have been, quoting as low as \$1.70 per bushel. It is claimed that prices will go to \$2 per bushel, and over, and in view of the strength of the market, this seems quite possible.

Grain—Very little change in oats during the past week. Merchants still report a fair demand, both from local and outside consumers, and prices hold firm at 45c. to 45c. for No. 3 oats, store, and 46c. for No. 2. Feed barley, 48c., track, and peas 67c. to 67c., high freights. The wheat market has passed through some exciting times. Prices experienced some sharp slumps towards the end of last week, and the beginning of this, the result being that several cents were chopped off previous figures. The market for May wheat, at Winnipeg, went down on the slump to below \$1 per bushel.

Hay—Market weak, in sympathy with English and other export markets. There are no further shipments going on to the Maritime Provinces, it is said, and the outlet being closed, stocks are accumulating. At the same time receipts are increasing, and everyone in the country seems to have hay to sell. Prices are steady, however, at \$9 to \$9.50 for No. 1; \$8 to \$8.50 for No. 2, and \$7 to \$8 for shipping.

Live Stock—According to cables, there was an improvement all around in Britain. London quoted Canadian cattle 1c. up, at 11c. for choice Canadian, and 1c. up, at 11c. for choice U. S. The Liverpool market was about 1c. up, at 10c. for Canadians, and 10c. for U. S. Select hogs sold at 6c., mixed bringing \$5.85, and heavy \$5.75, off cars. Choice cattle sold at 4c. to 4c.; good, 3c. to 4c.; medium, 3c. to 3c.; common, 2c., and inferior, thin animals, at 1c. to 2c. Sheep and lambs were quite firm, sheep selling at 3c. to 4c., under a good demand, and lambs bringing 5c. to 5c. and 5c.

Dressed Hogs, Etc.—There are practically no country-dressed hogs to be had. The market for abattoir dressed showed a tendency to decline, in sympathy with live hogs, and prices ranged from \$8.25 to \$8.75 per hundred pounds, for fresh killed. Country dressed would bring about \$7.25 to \$7.75.

Buffalo Markets.

East Buffalo.—Cattle—Fairly active steady; prime steers, \$5.35 to \$5.65; shipping, \$4.60 to \$5.15; butchers', \$4.35 to \$5.85; heifers, \$3.25 to \$4.65; cows, \$2.50 to \$4.25; bulls, \$2.75 to \$4.25; stockers and feeders, \$2.50 to \$4.15.

Veals—Active; 50c. to 75c. higher, \$4.50 to \$8.50.

Hogs—Fairly active; pigs, 5c. higher; others, steady; heavy and mixed, \$5.25 to \$5.30; Yorkers, \$5.15 to \$5.30; pigs, \$5.05 to \$5.15; roughs, \$4.50 to \$4.75; stags, \$3 to \$3.50.

Sheep and Lambs—Western lambs, slow; others, steady native lambs, \$6.50 to \$8.50; Western lambs, \$7.75 to \$8.10; yearlings, \$6.75 to \$7; wethers, \$6 to \$6.25; ewes, \$5.75 to \$6; sheep, mixed, \$2.50 to \$6.

Chicago Markets.

Chicago.—Cattle—Good to prime steers, \$5.50 to \$6.30; poor to medium, \$4 to \$5; stockers and feeders, \$2.40 to \$4.45.

Hogs—Mixed and butchers', \$4.75 to \$5.05; good to choice, heavy, \$4.80 to \$5.10; rough, heavy, \$4.75 to \$5; light, \$4.70 to \$4.95; bulk of sales, \$4.80 to \$5.

Sheep and Lambs—Good to choice wethers, \$5.25 to \$6; fair to choice, mixed, \$5.50 to \$5.75; native lambs, \$7 to \$7.80.

British Cattle Market.

London.—Live cattle are quoted at 10c. to 12c. per lb.; refrigerator beef, 8c. to 8c. per lb.; sheep, 12c. to 13c. per lb.

Detroit Bean Market.

March, \$1.77 bid; May, \$1.86 bid; June, \$1.88 bid; July, \$1.92 bid.

It is generally the woman with a fine carriage who is most willing to walk.



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

EVERY DESCRIPTION OF BANKING BUSINESS TRANSACTED. Special attention given to accounts of Cheese Factories, Drovers and Grain Dealers, and all out-of-town accounts. Farmers' Notes discounted, Farmers' Sales Notes collected and advances made against their security. Municipal and School Section accounts received on favorable terms. SAVINGS BANK DEPARTMENT Deposits of Twenty cents and upwards received, and interest at 3 per cent. per annum, compounded four times a year, without presentation of passbook. No delay in the withdrawal of any portion or the whole of the deposit. G. de C. O'GRADY, General Manager.

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



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"The awakening of our best sympathies, the cultivation of our best and purest tastes, strengthening the desire to be useful and good, and directing youthful ambition to unselfish ends—such are the objects of true education."—J. T. Headley.

The Voice of the Habitant.

That the spirit of poesy should be found in Quebec is no marvel. Given a land of rugged mountains and fierce torrents; of furious wintry storms, and sudden summers creeping up soft and green from the southland; of red-shirted lumbermen shouting on the river, and fleet-footed coureurs-de-bois gliding silently through the woods—people that land with a simple, pastoral, religious, yet superstitious race, unversed in the hard facts of science, and the much wisdom that comes from many books, and there one must find poesy, a poesy that, had it never found voice in the measured beat of iambus or trochee, had yet been born in the thought of the habitant, who descends in the winds that sweep down from the hoary Laurentians, the sound of weird shrieks and laughter from the chasse galerie, and who knows that through the moanings of the deep forests come also the mournful howlings of the dread Loup Garou.

Yes, Quebec has had her poets: poets of thought in plenty, poets of word who have voiced that thought in the plaintive songs droned behind the oxen in the fields, or measured off to the dip of paddle or creaking of oar on the river. But these poets have spoken for the most part in French, French readable in Paris, if all but unrecognizable in the strange patois accent of this curious Canada, where a great French Province lies happily under the flag of Britain, and the foremost statesman in the whole country is a Frenchman, with a British heart.

Quebec has had her poets. She has, however, had but one pre-eminent interpreter, but for whom French Canada would to-day be, to a great extent, a sealed book to the rest of the Dominion, and he, following out the contradiction of it all, is no French-Canadian, no Frenchman even, but an Irishman of the old sod itself. Little need to speak his name, for who does not know that French Canada has spoken to the world through Dr. W. H. Drummond, author of "The Habitant," and the many delightful poems that have succeeded it?

Dr. Drummond was born at Carrawn House, Leitrim County, Ireland, in April, 1854, and spent his earlier school days at Mohill in the same county. While still quite young, however, he came to America and studied for a time in the Woodstock High School. After graduation there, he took his medical training at Bishop's College, Lennoxville, from which he returned to practice medicine at Montreal, and,

incidentally, to begin the literary career which has marked him, if not the founder of a school, at least—as Dr. Louis Frechette has said, in transferring to him the title conferred upon himself by "le grand poete Americain Longfellow"—the "Pathfinder of a New Land of Song."

Undoubtedly, Drummond had literary genius to begin with. Had he never seen French Canada he would have been a writer. But, also, had he never seen French Canada he would probably have missed the opportunity which made him a "pathfinder." In the literary world, in these days of much-travelled highways, it is a mark of originality even to discover a new by-path. J. M. Barrie will ever stand pre-eminent as the first of the "kail-yard" school, Wordsworth of the nature school, and so on. In the same way will Drummond ever stand apart as the first to discover the literary possibilities hidden among the lives of the habitants. "Having lived practically all my life side by side with the French-Canadian people," he says, "I have grown to admire and love them,"—and perhaps this last was the secret of it all. Loving these people, yet not one of them, he saw that they were unknown,

one and all with the ring of truth in them—poems telling of the simple lives of the habitants; their adventures on the rivers; their work in the fields; their little love affairs, and their rollicking parties, when the fire blazed merrily in the "beeg box-stove," while Bateese or Joe tuned up the fiddle, and gay couples took the floor to dance till dawn. Between the lines, too, might be read much of the inner life of these people their fund of good spirits and sly sense of humor, their little philosophies, their simple religious faith, and their quaint superstitions. Above all, might be gathered an inkling of the contentment that marks the genuine habitant, a contentment that comes of wanting little, enjoying much, and trusting all else to "le bon Dieu" who can make all things right. In these busy days it has become somewhat the fashion to smile at the nonprogressiveness of the habitant; yet, perhaps, in his philosophy he is richer than we. It is at least something to be satisfied with life. Read what he says:

De fader of me, he was habitant farmer,
Ma gran'fader too, an' hees fader also,
Dey don't mak' no monee, but dat isn't fony.

For it's not easy get ev'ryting,
you mus' know.

All de sam' dere is somet'ing
dey got ev'ry boddy,
Dat's plaintee good healt', wat
de monee can't geev,
So I'm workin' away dere, an'
happy for stay dere
On farm by de reever, so long
I was leev.

O dat was de place w'en de
spring tam she's comin',
W'en snow go away, an' de sky
is all blue—
W'en ice lef' de water, an' sun
is get hotter,
An' back on de medder is sing
de glou-glou—

W'en small sheep is firs' comin'
out on de pasture,
Deir nice leetle tail stickin' up
on deir back,
Dey ronne wit' deir moder, an'
play wit' each oder
An' jump all de tam jus' de
sam' dey was crack—

An' ole cow also, she's glad
winter is over,
So she kick herseif up, an'
start off on de race
Wit' de two-year-ole heifer, dat's
purty soon lef' her,
W'y ev'ryting's crazee all over
de place!

We leev very quiet way back on de con-
tree,
Don't put on sam' style lak de big vil-
lage,

W'en we don't get de monee you tink
dat is fony,
An' mak' plaintee sport on de Bottes
Sauvages.

But I tole you—dat's true—I don't go on
de city

If you geev de fine house an' beaucoup
d'argent (plenty of money)—
I rader be stay me, an' spen' de las' day,
me.

On farm by de rapide dat's call Cheval
Blanc.

Dr. Drummond's poems have been

collected into three well-known volumes, "The Habitant, and Other Poems," "Johnny Courteau, and Other Poems," and "Philorum's Canoe and Mademoiselle Vercheres." To know Drummond, is to be enthusiastic over him, and the number of those who read his works increases rapidly. Hence, it is easy to foretell that a most enthusiastic welcome awaits a new volume, "The Voyageur," which is to appear in the early future.

Our Habitant Bro'her.

Addressed to Dr. W. H. Drummond.

Bateese and the Habitant Farmer and the
Cure of Calumet,

And the Voyageur on the River! are you
telling us of them yet?

Or is it only an echo, that comes to me
here apart?

Your voice or an echo—forever they are
dwelling within my heart;

And as long as the great Laurentians
send their waters to the sea,

As long as the winds kiss the maple or
the birds sing in the tree,

Will a warmer love awaken toward him,
contentment-blest,

In the bosom of his brother who is toil-
ing in the west.

We may have come from Britain, he may
have come from France,
And perhaps the fathers of both of us
once carried a Norman lance:

We fought together in Egypt, and down
on the Transvaal veldt,

What matters the stock we came of—
Saxon, Norman or Celt?

So long as we know he is faithful, and
just as devoted as we,

We will grasp his hand and press it here
in the land of the free,

And we'll give our neighbor brother a
hearty clap on the back,—

We, who were born beneath the flag; for
he's stood by the Union Jack.

If somebody heard of a murmur and pic-
tured a separate aim,

Let us fairly face the question, were we
not ourselves to blame?

And shouldn't he love the early words
that over his cradle were sung?

As little as you or I can do is to honor
his mother tongue.

Then let us thank you, Drummond, for
making his nature known:

If we learned to honor him for your
sake, we will love him for his own.

And knowing that he is with us in peace
or in wars we wage,

We'll work or we'll fight together for our
noble heritage.

Bateese and the Habitant Farmer and the
Cure of Calumet,

And the Voyageur on the River! are you
telling us of them yet?

It is not the voice of the poet, rendering
line upon line,

But the very soul of the human, breathed
on by spirit of thine,

The eyes of a world inviting the homes
of a race to view.

Where the hearts are kind and gentle,
noble and fond and true,

Bidding the Celt and the Saxon, the
hand of the Norman take,

In a warm fraternal greeting for the
great Dominion's sake.

FRANK LAWSON.



Wm. Henry Drummond, M. D., F. R. S. C.

misunderstood by their countrymen, and felt that in cosmopolitan Canada this should not be. Hence, with no ambitious schemes, probably, for doing away with the "race strife"—for the most effective reformers are often the least assuming—he began to write of these people, using their dialect, letting them, in fact, speak through him, so fully had he made their thought and their lives his own. "The Papineau Gun," and "The Wreck of the Julie Plante," were two of these earlier poems, and so immediate was their popularity all over Canada, that Dr. Drummond's place as a writer was at once assured.

Following these came other poems,

National Education Association.

One of the most interesting and useful features of the World's Fair at St. Louis last year, was the assembling of the great National Educational Association, at which addresses were given by the leading educationists from every State in the Union, and from some outside points beside. These addresses have been perpetuated in a handsomely bound volume of over 1,000 pages, which has been recently issued by the Association at Winona, Minn., and will be found of much value to all interested in educational work into whose hands it may fall. We desire to express our hearty thanks to Mr. Irwin Shepard, Secretary of the Association, for his courtesy in sending us a volume which is being much appreciated by all who have access to it here. The papers and addresses delivered at the St. Louis gathering cover almost every phase of educational work now in progress or under construction upon this continent.

John Morley on War.

I hear constantly, when people are advocating the necessity of a military policy and military training, they say, "Oh, but remember, military training gives men courage. It teaches Englishmen and Scotchmen the virtues of discipline." I thought, the other night, when I came down here in a blizzard, the wind raging, snow falling, all dim and dark and dangerous: "Am I to be told that the engine-driver on the footplate of that engine has not got courage and discipline, and must needs become a soldier in order to learn what courage and discipline are?" No man in the country is more incapable of using a disparaging word of the soldier who does his duty, but to tell us that military discipline is the only discipline that will make men of us, that I entirely deny.—John Morley.

Assuming Nationhood.

The decision of the Federal Government to assume the responsibility of maintaining the dock-yards at Halifax, N. S., and Esquimalt, B. C., at an annual cost of \$2,000,000, has scarcely met with a dissenting note. Something of the real independence of nationhood thrilled the whole Dominion when it assumed the responsibility of coast defences, and nothing since the South African war has done more to impress both Britain and the colonies with the significance of this young nation than the assumption of her own defences. Canada, more than any nation, regrets the barbarous custom of national armaments, but since they are, as yet, a necessary evil, she cheerfully shares the burden of their maintenance with the much-burdened taxpayer of the Old Land.

The Gardener Bird.

The highest development of the decorative instinct in animals is found in the gardener bird (amblyornis). This plain-looking native of New Guinea builds its nest on the ground, spreads moss before it, and over this green carpet scatters bright berries, flowers and insects. As the flowers wither they are replaced by fresh ones. The whole establishment serves only as a sort of pleasure resort.

The Pride of the Family.

This is a solemn conclave over the set of a dress, the becomingness of a hat, and the shade of a ribbon; for the "Pride of the Family" is to be a bridesmaid, and she is expected to do credit to her acknowledged position. The moment is evidently of grave importance, one not to be treated with levity. The mother has turned out her stores; the handbox has yielded up its treasures, and all alike await anxiously the momentous decision, which hangs upon "reflections" of the tell-tale hand-glass.

H. A. B.



The Corset and the Growing Girl.

This time I am going to take advantage of my privileges as a trained nurse, and put in a plea for the deliverance of growing girls from corsets. The corset-made figure is an ugly one at best, but if grown persons elect to exhibit themselves in that form one cannot well prevent it. They have, at least, ceased growing, but it is a shame to allow a young girl so to deform herself. From fourteen years up, the child's body begins to take on the fashion and functions of the adult, and it is said that the change is not absolutely completed until the twenty-fifth year. In view of this statement, it is surely not pulling the lines too tight to say that absolute freedom should be allowed until the twenty-first year. The natural supports of the body are the muscles of back, chest and abdomen. They are fully competent for this task if not interfered with. If they should fail, the proper treatment is exercise, to develop and strengthen them. The woman whose muscles are strong and whose body is upright has usually a beautiful form, and often a slender waist. The chief attraction of corsets seems to be that they reduce the size of the waist, and this, of course, they can be made to do, at the expense of stomach, liver, lungs, etc. As a matter of fact, those who are built on the plan that permits a small waist retain it much more surely and gracefully by the help of exercise and strong, pliant muscles than by corsets. There are some persons who are not built in such a way as to be entitled to a small waist, but they can, at least, be straight and well proportioned, and even graceful, with the grace of perfectly-functional muscles. A girl who has worn corsets will say that she is comfortable in them, and needs the support, etc., etc., etc. Of course, this is so. She has relieved the muscles from doing their proper work, and they have become weakened and unable to do it, and will

never recover the power while she wears the corset. The young figure, too, has followed the line of least resistance; in other words, has adapted itself to the corset shape, so that the girl feels no particular inconvenience. She has gradually become accustomed to the weakened muscles and deformed shape. Girls, it is true, are sometimes shapeless and clumsy looking during the growing period, but the remedy, even from an æsthetic point of view, is not corsets, but freedom of movement, exercises and walking in the fresh air, with the chest up and lungs full. I have a great respect for the woman who, having a naturally stumpy figure, has respected it, and kept it straight and strong and in good order; not much for the person who, in connection with large hips and broad shoulders, has cultivated a corset-made waist. What is more distressing to see than the young girl with the old face, corset-made woman's figure, and dress to match, who is still young enough for short skirts, and often combines them with the other items. If corsets are worn at all, by anyone, they should be made to fit the individual's form AS IT IS, not as the corset makes or someone else thinks it ought to be. When a girl reaches the age of twenty-one, having paid due respect to her body, so that her muscles are strong and vigorous, the chances are that she will find corsets intolerable. If, however, she elects to wear them, she cannot do herself the same amount of harm that she might have done had she begun seven years earlier. Young girls, in these matters, usually follow the mother's advice, and it seems to me that few of her duties are clearer than to uphold and advise that course which tends to secure to her daughters perfect adult bodies, as well as cultivated minds. There is a want of dignity in the woman who sacrifices her body to appearances and the fashion of the day, and there are few who do not look well if they take pains to choose the clothing

that is suitable and looks well on them, rather than something which may be pretty and fashionable as worn by some other woman, but entirely unsuitable to their own individuality. I have yet to see the woman who cannot look well without the aid of corsets.

A. G. OWEN.

Notes from Over the Seas. SOMETHING ABOUT JOHN CHINAMAN.

John Chinaman is getting to be pretty well known in Canada, especially at the more extreme ends of the Dominion, where his value as an all-round, though somewhat expensive, domestic is fully recognized. There are those who consider the Chinaman as affording a solution to our own very serious problem of domestic service, but they are mostly those whose purses are pretty well lined, and who can afford to get themselves out of the tangle by a lavish expenditure of dollars. Because, to our Canadian eyes, all Chinamen look so much alike we are apt to consider that one is much the same as another, whereas there is as with difference between them as with the natives of any other nation upon earth. One mistress of a household, where a Chinese servant undertook every department of work from attic to cellar, and did it all well too, said: "Don't talk to me of women servants, if we can only keep 'King Ling,' he is worth all of them put together, and we don't grudge him his wages." Whilst of another Chinese domestic, who looked as if he must be King Ling's brother, smiling as placidly, going about as noiselessly, and apparently as busily, was spoken of invariably by his master as "that rascal of ours, not to be trusted further than you can see him." Now, let me introduce to you John Chinaman, as he appears to one who knows him well in his own country, and whose amusing description, written expressly for the pages of a parochial magazine which comes to me regularly from the Old Country, I venture to copy without waiting for a permission, which would, however, I feel sure, be readily accorded, if asked.

JOHN CHINAMAN.

"There is no doubt that, once you have come into contact with the 'Heathen Chinee,' and are enabled to observe him closely, your previous opinion of him soon undergoes a change. Seen, as he is by most Europeans, in close connection with Western civilization under the restraining influences of good laws,



(From painting by Thomas Hovenden.)

The Pride of the Family.

he is a "good sort," hard working, civil, jolly, and, in most cases, honest.

"His capacity and willingness for hard work would make a member of a Trades Union at home shudder. His pay is small, but so are his expenses. There are many cases on record where he has been known to exist on a dollar a month. The visit of the Fleet means a harvest to him, as he will hover about the ships in his sampan (small boat) and pick up all the refuse that is thrown overboard, such as bread, vegetables, etc. The fact of its having been soaked in salt water does not concern him: it all goes into his curry, along with some bad fish, to add a flavor.

"The English language in the mouth of a Chinaman is something to admire. It is called 'Pidgin English,' 'pidgin' being the nearest approach they can make to the word business. A peculiarity of a Chinaman is that he can't pronounce his R's. Thus, 'All right' is 'all light,' 'proper' is 'plover,' and so on. Chinese writing is too horrible for words. They have no alphabet, but a separate figure for each word. As the writing of each province varies, the study of Chinese calligraphy is one to be avoided. I would give you a sample, but regard for your feelings compels me to forego this pleasure.

"John is inordinately fond of his pig-tail. He would rather be deprived of anything but that, and to treat it irreverently is a great insult. It is a useful appendage, as it can be used in cold weather as a boa round the neck, and in windy weather for tying on his hat. When he gets bald, he wants to die; all the joy of life is gone from him. This pride in his pigtail is strange, when it is considered that the wearing of it was originally imposed upon the Chinese by the Tartars as a sign of servitude.

"The Chinaman holds life very cheap. The market price for a child's life used to be about a dollar, and that of an adult about ten dollars. The price has now gone up, one of the results of the advent of the European and American traveller. A Chinaman was accidentally knocked down a well here the other day by an Englishman. The Englishman was not up for manslaughter, but the matter was settled by the payment of £20 to his widow. She will retire for life on that."

I remember once to have read that "in China, if a woman murders her husband, she is chopped up into little pieces, and is thrown out without proper burial; but if a husband murders his wife, he is only imprisoned for three months." After which quotation what more need be said about John Chinaman, except that we are thankful he is no countryman of ours. His standard of right and wrong differs as wide as the poles from our own. We will not deny him the possession of some virtues, and we must acknowledge that he has not been without his uses since he landed upon our shores, our extremity having been but too often his opportunity, but it will be largely our own fault if, as was the case with the rabbits in Australia and with the sparrows in Canada, in the course of time the imported species do not overrun the land. H. A. B.

Humorous.

The Beginning.—Pat was a bashful lover and Biddy was coy—but not too coy. "Biddy," Pat began, timidly, "did ye ever think av marryin'?" "Sure, now, th' subject has niver entered me thoughts," demurely replied Biddy. "It's sorry Oi am," said Pat, turning away. "Wan minute, Pat!" called Biddy, softly. "Ye've set me a-thinkin'!"

The Scotch Witness.—A small Scotch boy was to give evidence against his father. The magistrate said to him: "Come, now, my man, speak the truth, and let us hear all you know of this affair."

"Weel, sir, dae you ken the coal wharf?"

"Yes."

"Weel, when you turn the corner you gang up the High street?"

"Yes, my boy, you're very clever."

"Weel, you can't see the pump, but you'll see the party on till you come to a pump."

"Yes, yes; I'll see it well."

"Weel, you can't see the pump, but you'll see the party on till you come to a pump."

"Yes, yes; I'll see it well."

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"Yes, yes; I'll see it well."

"Weel, you can't see the pump, but you'll see the party on till you come to a pump."



The Sermon in the Hospital.

(Continued from page 306.)

"Poison not thy wine
With bitter herbs if He has made it
sweet;

Nor rob God's treasures because the key
Is easy to be turned by mortal hands.
The gifts of birth, death, genius, suffering,

Are all for His hand only to bestow.
Receive thy portion, and be satisfied.

Who crowns himself a king is not the
more

Royal; nor he who mars himself with
stripes

The more partaker of the Cross of
Christ.

But if Himself He come to thee, and
stand

Beside thee, gazing down on thee with
eyes

That smile, and suffer; that will smite
thy heart,

With their own pity, to a passionate
peace;

And reach to thee Himself the Holy
Cup,

(With all its wreathen stems of passion-
flowers

And quivering sparkles of the ruby
stars),

Pallid and royal, saying "Drink with
Me";

Wilt thou refuse? Nay, not for Para-
dise!

The pale brow will compel thee, the pure
hands

Will minister unto thee; thou shalt take
Of that communion through the solemn
depths

Of the dark waters of thine agony,
With heart that praises Him, that yearns
to Him

The closer through that hour. Hold
fast His hand

Though the nails pierce thine too! take
only care

Lest one drop of the sacramental wine
Be spilled, of that which ever shall
unite

Thee, soul and body to thy living Lord!
Therefore gird up thyself, and come, to
stand

Unflinching under the unfaltering hand,
That waits to prove thee to the utter-
most.

It were not hard to suffer by His hand,
If thou couldst see His face: but in the
dark!

That is the one last trial: be it so.
Christ was forsaken, so must thou be
too;

How couldst thou suffer, but in seeming
else?

Thou wilt not see the face nor feel the
hand,

Only the cruel crushing of the feet,
When through the bitter night the Lord
comes down

To tread the winepress. Not by sight,
but faith,

Endure, endure—be faithful to the end!
—Harriet Eleanor Hamilton King.

Winning Souls for Christ.

Selections from "St. Andrew's Work,"
by Rev. D. Hague, M. A.

Oh, that every Christian might be led
to see that he should earnestly try and
make a personal effort to save others.

Unless he waters others he will not be
watered, and the candle hid under the
bushel of cowardice or inactivity will
slowly but surely be extinguished. The
soul that ceases to confess Christ will
cease to possess Him; the Christian that
does not give out will soon not take in.

One has illustrated this by a geographic
comparison. There is the sea of Galilee,
with its sparkling waters fresh and pure
and sweet. Why is it so sweet and
fresh and pure? Because it is always
giving out, as well as taking in; it has
an outlet as well as an inlet. But look
at the Dead Sea! It is lifeless, and

dreary, and funereal. And why? It has
an inlet, but no outlet. It is all for
self. It takes in all it can, but gives
nothing out. The Christian who does
nothing for Christ, never goes forth to
sow by all waters the precious seed that
he has so freely received, never finds a
thirsty soul to bring to the living water,
will shrivel, and wither, and waste as a
fruitless branch. Would that every
Christian would at least endeavor to
win a soul. It is our calling. It is our
profession. It is our duty.

The worker for souls must always be
natural, open and true. His words and
character must be in harmony, for if the
one belies the other his work is vain.
He who goes forth to influence his fel-
low man for Christ must be sure, first of
all, that he is one who acts as he be-
lieves, speaks as he thinks, and appears
to man as he appears to God; and then
must carefully beware lest his manner and
words be more unctuous and gracious
than the reality within. All pedantry,
affectation, unnatural and goody-goody
phrases are to be avoided as poison.
Every overture that is made and every
word that is said must be made and said
in the frank and hearty manner of one
who is, before man and before God, with-
out guile, or deceit, or sham, or hypo-
crisy, or any such thing. I shall never
forget the way in which a friend of mine,
a very fine young fellow too, when asked
what he thought of a certain Christian
worker, replied: "Oh, he is too oily."

What he meant was that his manner was
too smooth, or, as one remarked of a
certain politician, "He's too sweet to be
wholesome." I might mention other
very necessary characteristics if space per-
mitted, such as wisdom, love, faith,
patience, sympathy, etc., which the work-
er for Christ should earnestly covet, and
constantly endeavor to attain by prayer
and practice; but there is one that in
some ways perhaps surpasses, if it does
not include them all; and that is the
one thing often lacking, but sorely needed
—the Divine gift of Common-sense.

If Christians only realized more how
much they could do by a simple word,
or how many opportunities are given
to them by God if they would only take
them, they would not miss so often that
wonderful and indescribable joy that
comes to the man who speaks a word for
the Master to another soul. If you have
a word to say, say it. If you are ever
moved to open your lips, open them, for
while we stand hesitating the angel of
opportunity goes past our doors, never to
return again. The late Captain Hope, a
brave and true servant of Jesus Christ,
told his doctor a few days before his
death, that when he was a midshipman,
an old officer said to him one day: "I
never go to bed without prayer,
do you?" It was a simple question
and yet was the means of controlling
a great and noble life. "It is between
seventy and eighty years ago, but from
that day to this I have never done so
either." Then he added: "See the in-
fluence of a good word."

"In the morning sow thy seed, and in
the evening withhold not thine hand: for
how knowest thou which shall prosper,
either this or that, or whether they
shall be both alike good."

Abiding Peace.

Long years of peace;
When far from me seemed gloom and
death,

When sorrow seemed an old man's
dream,

May I not once more feel your breath?

Long years of peace;
I see far in front of me

A heaven made up of years like yours,
A whole, a bright eternity.

Long years of peace;
I think of you as yet to come,
And wonder when Time's last New Year
Shall gladly bid me welcome Home.

—Horatius Bonar's Last Hymn.

FARM MANAGERS

On April 15th the Ontario Agricultural College at Guelph will turn out a number of young men specially qualified to act as foremen or managers of large farms. These men have all had practical farm experience to start with, and in addition they have had two or more years at the Agricultural College, learning the most modern methods of farm practice. They are all good workers and capable of handling men and teams. They will take engagements for the spring and summer months, or from one to five years. Salary expected, \$40 a month and upwards, according to work and responsibility.

G. C. CREELMAN, President.



PIMPLES

Blackheads, etc., completely eradicated and a clear complexion assured when **CURE AND PIMPLE CURE** is used. Don't go about with a blotched complexion when you can be cured. Consultation invited at office or by mail.

SUPERFLUOUS HAIR

Moles, etc., eradicated forever by our method of Electrolysis. Satisfaction assured. Send 10c. for books and sample cream.

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Dept. F. 502 Church Street, Toronto.
Established 1892.

A WOMAN'S SYMPATHY



Are you discouraged? Is your doctor's bill a heavy financial load? Is your pain a heavy physical burden? I know what these mean to delicate women—I have been discouraged, too; but learned how to cure myself. I want to relieve your burdens. Why not end the pain and stop the doctor's bill. I can do this for you, and will, if you will assist me.

All you need to do is to write for a free box of the remedy, which has been placed in my hands to be given away. Perhaps this one box will cure you. It has done so for others. If so, I shall be happy, and you will be cured for 2c. (the cost of a postage stamp). Your letters held confidentially. Write to D. B. CURRAH, Windsor, Ont.

Clothes Cost Money **Time is Money**

The New Century Washer saves both—nothing costlier or more effective—nothing half so quick. You sit to operate it, and a tubful of clothes may be thoroughly cleaned in five minutes. You cannot make a more profitable investment—the profits direct and incidental cannot be estimated. Local dealers sell it at \$3.50. Ask your dealer for it. If he cannot show you the machine write us for booklet.

THE DOWSWELL MANUFACTURING CO. LIMITED
HAMILTON, CANADA

\$4.50 Spring Suits

We make ladies' suits. Our leader is a cheviot suit in black, navy, grey, dark red, fawn, seal brown and myrtle green. The cloth is wool, suitable for winter or early spring wear. It is a \$15 tailored suit. We the manufacturers offer it to you at the factory price \$4.50. We sell hundreds of these suits. The model is the latest spring style. The jacket has a tight fitting back with a half tight fitting front, with belt at waistline. It is lined in no-overlaid satin. The skirt is seven good, tailor stitched in silk, faced with canvas, and bound with velvet, lap seams. We can supply skirts to these suits trimmed with tabs of the goods at the hip or at the knee as preferred, or we can supply skirts with a back-on each seam. This suit is elaborately trimmed with buttons. Skirt or coat alone \$2.50. Any suit may be returned and money refunded, 30 to 44 bust.

Shirt waist Suits, \$4.50 tailored waist, supplied instead of a coat from any of the cloths or from any shade Lustre, waist allured in latest spring style.

Skirts alone from any of the goods described above \$2.50. May be had box pleated, tucked, elaborately trimmed with straps of the goods.

Waists, Spring styles, any color China Silk \$2.25, best fabric \$2.50, lustre \$1.50, velvet \$1.95, white lawn \$1.00. Add 15c. for postage.

Jackets, Spring styles, Tight back, half flight front, cape trimmed, any color wool frizee hip length \$3.95, knee length \$4.95. Floor length, \$6.00.

Raincoats—any shade (crayoned) early spring styles, floor length, cape and belt, trimmed, \$5.00 for \$12 kind.

Southcott Suit Co., LONDON, CAN. 120 KING ST.

Advertise in the Advocate

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



Pat's Angel.

The morning was cold and cloudy,
A regular Chicago day,
I had just got my batch o' "Herald's,"
And was hurrying right away.

There had been a sleet a-fallin',
And it made things awful slick,
And I saw a man come down, sir,
Jus' come down double quick—

But somehow while I's laughin',
My feet went from under me,
And I come down jus' ker-whallop,
And the stars that I did see!

I thought I's dead for a minute,
So I let myself jus' lay,
And I wondered kind o' stupid,
If I'd get to heaven that day—

"Poor fellow, he's had a tumble,
Just help me lift his head,"
" And your scarf will stop the bleeding,"
Another angel said.

Somehow I didn't know nothin',
Till I opened my eyes up wide,
In what I guess was a drugstore,
'Cause there's bottles on the side,

At first I's so awful happy
I couldn't say a thing:
Then I said, "If you're an angel,
Won't you let me hear you sing?"

She said I could allus tell 'em
By the silver cross they wear,
And she explained to me her meanin',
And I thanked her for her care.

And now when I meet a lady,
Who wears a cross like that,
I bow as polite as I can, sir,
And take off my old felt hat,

Out West among the Indians.

CHAPTER I.
The Telegram.

It was a pleasant June day in Summerville, and the streets were crowded with horses, carriages and people, but among the crowd was a messenger boy who was hurrying to the house of Mr. and Mrs. Green. When the messenger got to the house, he ran up the steps and rang the bell and delivered his message. As Mrs. Green took the message, or telegram, and read it, she was surprised, for it read as follows: "Come to Mildmay at once." When Mr. Green came home he started as soon as possible, and when he reached Mildmay he was greeted by a stout man, who Mr. Green knew as a Government officer by his badge. The man said, "There is very bad news for you, as you will lose your home and property, as you are not the rightful owner of it, and the only chance for you is to go out west to some settlement and try to earn a living."

had waited for the next train, which happened to be theirs. The Indians broke the windows with their bows and arrows. One Indian tried to stop the train, but was killed. They were soon out of their reach, and were speeding on again as if nothing had happened, but for the poor fellow's eye, which began to swell. In about a week they reached the station, from which they went by wagon.

CHAPTER II.
Jack's Scare.

When they had started by wagon next day it was ten o'clock. All that morning they travelled through bluffs, over hills, and through sloughs, and at noon camped near a cluster of trees. After we had dinner, Jack went to find some water. He was just dipping it up from a spring when he heard a low growl; he looked up, and there was a black bear about ten feet away, coming towards him. He yelled, but the bear had him and was hugging him unmercifully. Mr. Green heard him yell, and ran around the trees with his rifle. When he saw the bear he got ready to shoot it in the side, so as the bullet would go right through the bear, as he was in close range. Just as he shot the bear jumped, and the bullet grazed Jack's hands. The bear let go of Jack and went for Mr. Green, but was soon laid out. When Mr. Green got to Jack's side he lay in a senseless heap. Mr. Green dashed water in his face, and when he recovered his senses he went with his father and cut the bear meat up. They then started again and went about three miles and got stuck in a slough. They were calling at the horses, and did not notice a party of cautious Indians approaching. They yelled at them, and said in broken English, "Surrender or you die." The Indians then tied them on the ponies, and then they took the horses and wagon out of the slough, and took them to camp. They found that the camp belonged to Big Wolf. They were kept in captivity for a month or more, when they heard a rebellion had broken out. They hoped the troops would visit the camp, as Mr. Green declared he would join them. In about three months more they saw objects coming over the hill in the distance, which proved to be the troops. After hard fighting for two days the camp was taken and Mr. Green joined the troops. It was not without loss that the camp was taken, for three officers and thirty-three soldiers were killed, and three wounded. Shortly after Mr. Green was promoted in the regiment, and on returning to Summerville fell heir to the property of his brother, and was as well off as ever.

GORDON CASWELL (age 12).
Saskatoon.

Humorous.

Epitaph on John Adams, of Southwell, a carrier, who died of drunkenness:
John Adams lies here, of the parish of Southwell,
A carrier, who carried his can to his mouth well.
He carried so much, and he carried so fast,
He could carry no more, so was carried at last.
For the liquor he drank, being too much for one,
He could not carry off, so he's now carrion.

Little Stanley had spent his first day at school. "What did you learn?" was the mother's first question. "Didn't learn anything." "Well, what did you do?" "Didn't do anything. But there was a woman there who wanted to know how to spell 'cat,' so I told her."

"Ha! ha!" chortled a loud-voiced man, slapping Grimshaw on the back, "I'll bet ten shillings you don't remember me!" "You win," returned Grimshaw, coldly, as he passed on.

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

A PLACE OF DEPOSIT

For the funds of individuals, corporations, institutions, firms, societies, clubs and associations of every kind; as well as for the moneys of executors, administrators and trustees.

INTEREST ALLOWED AT 3 1/2 PER CENT.

PAID-UP CAPITAL SIX MILLION DOLLARS

CANADA PERMANENT

MORTGAGE CORPORATION

Toronto Street - - - Toronto

A Farmer's Request

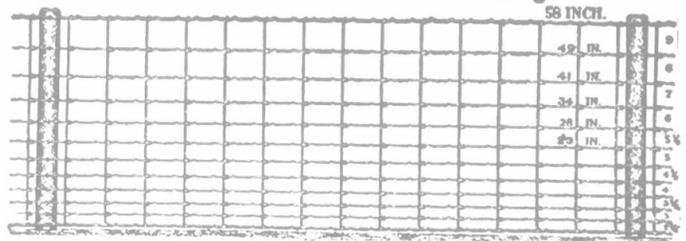
"You must wake and call me early,
Call me early, Katie, dear,
For the House and Barn need painting,
And the Summer Sun is near!"

THE MOST RELIABLE PAINTS—MADE IN A SYSTEMATIC MANNER BY MODERN MACHINERY AND THE FINEST OF STOCK—ARE MANUFACTURED (note name carefully) BY

The Canada Paint Company LIMITED.

WE LEAD THEM ALL IN QUALITY, IN CHEAPNESS, AND IN QUANTITY SOLD

Galvanized Steel Woven Wire Fencing



American Field and Hog Fence.



Hinge Joints and Tension Curves.

We call your special attention to our extra Heavy Fence, all Horizontal Wires No. 9 gauge.

If your dealer does not handle our Fences, write to us.

Made by The Canadian Steel and Wire Co., Limited, WINNIPEG, MAN. HAMILTON, ONT.



THE ANCHOR WIRE FENCE

Is the strongest and best farm fence on the market. It is made throughout of No. 9 galvanized steel wire, either plain or coiled, but heavier uprights may be used if desired. Any intelligent person can construct the fence by following directions as given in our free catalogue. Agents wanted.

GATES AND FENCE WIRE FOR SALE.

ESPLEN, FRAME & COMPANY, STRATFORD, ONT.

The Daniels INCUBATORS



Are the latest and most modern invention for artificial hatching of turkeys, chickens and ducks. Do not forget we guarantee the Daniels incubators to be satisfactory to the purchaser. We manufacture Chas. A. Cyphers Model Incubators and Brooders.

Made in Canada. We carry a full line of poultry supplies. Our new catalogue is out, and is free for the asking.

G. J. DANIELS, 196 to 200, TORONTO SHOEMAKER'S BOOK on POULTRY



and almanac for 1905, contains 224 pages, with many fine colored plates of fowls in life. It tells all about chickens, their care, diseases and remedies. All about INCUBATORS and how to operate them. All about poultry houses and how to build them. It's really an encyclopedia of chicken-dom. You need it. Price only 15c.

G. C. SHOEMAKER, Box 806, FREEPORT, ILL.

\$12.50 For 200 Egg INCUBATOR
Perfect in construction and action. Hatches every fertile egg. Write for catalogue to-day.
GEO. H. STAHL, Quincy, Ill.

\$9,000 Poultry Catalog
40 kinds Turkeys, Geese, Ducks, Chickens, fowls and eggs cheap. 100 grand pictures, 20 loose plans. We make hens lay, cure disease, etc. Send 10c for mailing catalogue. Incubators 30 days free trial.
J. R. Brabazon Jr. & Co., Box 112 Delavan, Wis.

Barred and White Rocks—Good big Barred P. R. cockerels \$1.5, and \$2 each. Fl-hel White Rocks at \$2 each \$5 per trio.
H. GEE & SONS, Selkirk, Ont.

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.

INCUBATORS, Poultry and Pet Stock Supplies.—Our incubators are guaranteed. You run no risk. Write at once for a large new catalogue. **A. J. Morgan, London, Ont.**

AMMOTH Bronze turkeys. A choice lot of heavy birds, bred from my imported toms. Stock from the 1st-prize Pan-American winners. Pairs and trios mated not akin. **R. G. Reese, Glanworth, Ont.**

LARGE Snow-White Wyandottes. Eggs \$2.00 per 15. 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.

BARRED ROCKS—Cockerels for sale. Eggs from prize stock, \$1 setting. Emily Spilsbury, Colbor, O., O.K.

WHITE LEGHORNS and White Wyandottes—Ontario's leading strains. Choice birds for sale. Write for mailing list. Eggs \$2 per fifteen. Ernest Charlton, Iderton, Ont.

WHITE ROCK, White Wyandotte cockerels. The utility breeds. Prizewinning strains. **F. D. Aude, Chesapeake, Ont.**

FOR your Orpington winners and breeders go to Willow Brook Farm, who have always beaten the breed by calling themselves the originators. Over sixty (60) prizes and sixteen (16) special's at Madison Square Garden, New York, in the past three years. The largest and best stock in this country to select from. Send two-cent stamp for 40-page illustrated catalogue, testimonial book, and mailing list describing thirty-two breeding yards and prize of eggs. Willow Brook Farm, Box 74, Berlin, Conn.

WHITE WYANDOTTES, great winter layers. Strongly fertilized eggs, \$1.50 per 15. Incubator lots special. Chas. A. Goulding, Vinemount, nt.

BROWNSVILLE Poultry Yard supplies Buff and Barred Rock eggs at farmers' prices. Best pen headed by sons of 1st Ontario winner. **F. Gill, Brownsville, prop.**

WHITE WYANDOTTE eggs. Pen headed by grand Duston cockerel. **W. D. Monkman, Bondhead, Ont.**

NITH Grove strain Buff Orpingtons, Eggs \$1 per 15. **E. Brown, Haysville, Ont.**

BUFF ROCKS for sale. Cockerels, \$2; trios, \$3, from good winter-layering strain. Chas. Nixon, St. George, Ont.

\$3 a Day Sure
Send us your address and we will show you how to make \$3 a day absolutely sure. We furnish the work and teach you free, you work in the locality where you live. Send us your address and we will explain the business fully, remember we guarantee a clear profit of \$3 every day, work absolutely sure. Write at once. **THE GREAT SYSTEM CO., Box 706, Windsor, Ont.**

I WOULD LIKE EVERY WOMAN

to wear for our spring style and samples of our \$1.00 to \$12.00 Suits in all sizes and fits. Also Raincoats, Skirts and Waists. Write me to-day. **Manager Southcott Suit Co., Dept. 20, London, Can.**



Our Competition.

Once again I must say how much we have been gratified at the result of our competition on "Incidents Showing Intelligence in Animals and Birds." As usual, the only trouble was in awarding the prizes, for so many and so interesting were the letters received that the task of judging has been no sinecure. I am sorry to say that we were obliged to throw out a few essays from the prize list on account of their length, some of our competitors having written over 300 words instead of "about 200." In other cases, again, the incidents related, although very interesting, seemed to show training rather than intelligence on the part of the animals referred to. After these were put aside, however, we had still to cross our Rubicon, for there yet remained several essays which met all our requirements. From these, after much deliberation, we picked out five which seemed best—three for the regular prizes and two for extra awards; the winners being Violet Kennedy, Ottawa; "Bo-peep," Allisonville, Ont.; "Starlight," Burnt River, Ont.; M. E. Smith, St. George, Ont., and F. G. Wilkin, Maple Grove, Ont.

The honor list, exclusive of prizewinners: Sobersides, Colin, Deborah, Periwinkle Wrinkles, Mrs. E. C., M. A. C., A Day Dreamer, An Oxfordite, A. A. Park, C. W. B., Admirer of Birds, Florence Clark, Alh, Gertrude Minor, Arch. Harris, Viola Ewens. . . . A few of the "honor" essays have been held over, and will be published, if room can be found for them, at some future date. We are glad to see that so many have taken an interest in this subject, and hope that each competitor will continue to use his or her influence to the utmost in inducing children and others to be kind to our poor dumb friends—so true, so faithful, even when treated with but little consideration. People are inclined to think that the days of slavery are over, yet one cannot but feel sometimes, when watching the heartlessness with which the animals about us are often treated, that there still exists a slavery more dreadful than that which wrested groans from the southern Negro in the worst of his days. As a rule, animals do not groan and moan. Perhaps if they did, they would receive more commiseration in their sufferings.

There is a little paper published in the United States called "Our Dumb Animals," which is doing a great work for the animals of that country at least. Each issue contains little incidents telling of the kind and intelligent things which animals have done. Each issue also tells something of the work the Humane Society is doing in the cities—of how a man here has been fined for driving a horse with sore shoulders, or one whose working days should have long since past; of how another there has been compelled to hand over his good money for having brutally beaten a dog, and do on. We remember reading in one issue of a fine of \$15 being exacted from a creature who had thrown a poor cat from a three-storey window with such force that some of its bones were broken. How glad one felt that a Humane Society policeman happened to be just there to teach the wretch a lesson.

We hear little of the doings of the Humane Society in the country, yet sometimes one wishes that its agents might penetrate to the very backwoods of it. Could they do so, one might, perhaps, see a lot of horses being compelled to work with raw, festering sores under rough, rattling collars, less of kicks and blows about stables; less, even, of broomsticks flying after dogs and cats about houses—for, then, human nature might be better awakened, perhaps, to the rights of the animal world. Cruelty to animals is not the rule in the country, yet to a certain extent, it exists. In so far as it does, it must surely be an outcome of thoughtlessness, a sort of feeling that animals are not capable of suffering or feeling as are human beings. And yet every animal is supplied with

its compliment of nerves, and can suffer just as keenly from physical, and perhaps, sometimes, from mental pain as the daintiest lady in the land. It is no myth that dogs, again and again, have starved to death on the graves of their masters. The subject of intelligence in animals has, moreover, been made a matter of study by many of the most noted naturalists, who, almost invariably, have come to the conclusion that the majority of animals do think. Lord Avesbury, for instance, says he holds it inconceivable that anyone who loves animals, and has given any attention to them, should come to any other conclusion about them.

But I must stop. Sometimes it seems hard to realize that there are dozens of letters from correspondents awaiting their turn in the Ingle Nook, and that Dame Durden mustn't wax too prolix. It is so easy, for words run away with one on a pet subject. However, we hope the little incidents told by our correspondents may do something toward calling popular attention to this subject, and that thus our little effort towards awakening interest in and sympathy with our faithful, interesting, affectionate, if dumb friends, may not be lost.

DAME DURDEN.
"Farmer's Advocate" office, London, Ont.

A RIVAL TO "HANS."
A dairyman in one of our Canadian cities was looking for a horse suitable for use on his delivery wagon. His fancy was caught by "Fly," a skittish young creature, with a reputation not untarnished by runaways. This seemed a doubtful choice, but her subsequent conduct proved it to have been a wise one.

In a few months she had learned just where she should stop, and could be trusted to go for blocks without seeing her driver, always turning up at the proper place to meet him. In this way she not only lightened his work, but greatly saved her own strength. She could distinguish between the morning and evening round, and she certainly knew the days of the week, as the following incident will prove: There was one customer who required milk in the morning, but not in the evening, every day except Saturday, when the order was reversed. On that day she did not take any in the morning, but waited until evening in order to have a fresher supply for Sunday. Every morning during the week Fly stopped at this house in the morning, trotting past at night, but when Saturday came she invariably omitted to call in the morning, although she did not forget to stop on the second trip. How she knew which day was Saturday will always remain a mystery, as no one could think of any difference in her treatment on that day.

If Dame Durden had not limited us to one incident, there are very many equally curious stories about this intelligent horse.

BUFFER'S PRIZE.
Buffer was a very large yellow dog, which, during his eight years of life with us, showed in many ways that he was a very intelligent fellow.

On a bright morning in summer, my father saw Buffer coming across the fields from the opposite side of our village, and something in the dog's movements attracted his attention. The dog made slow progress, kept his head near the ground, and took an irregular course. As he came nearer, there seemed to be a little animal in front of him, and so it proved to be, for right home Buffer brought a little white pig, a few weeks old. When the pig tried to run to the right, Buffer put out his right paw and turned it about, or if on the left side, out went the other front paw, so right and left all across the field Buffer guided the pig. Father put it in a barrel in the drive-house till he should hear of the owner. Every little while, Buffer went to the barrel and looked in to see if his treasure was safe, and very sorry he seemed when the owner came for the piggie.

A TRUE FRIEND.

This little incident is true, and happened here at our home. My husband went to get out the horses one day after noon hour. He loosened one, started it out, and was leading the other. The first one stopped. He told her to go on, but she didn't, so he hit her with the end of a strap. Still she wouldn't move. On looking for the reason, he found our little girl (then just walking) sitting right where the horse would have stepped, as it was only a single door, and so impossible for the horse to get past without going over her. I do not expect this will take a prize, but I thought it might help to prove the thoughtfulness of horses. **STARLIGHT.**

AN INTELLIGENT DOG.

This little anecdote I am about to relate is an evidence of our dog's wisdom and affection. One morning last May, while we were taking the morning meal, Collie came running to the house and whined and scratched at the door. He was not in the habit of doing this, so I opened the door and asked him in. He never comes in unless we invite him, but he refused to enter. He ran back to the drive-shed door and barked. Father went out, and we watched from the window. As father approached the drive-shed he heard a noise somewhat like pounding, so he opened the door. The noise ceased, but when he went in, he found one of the horses severely cut. The other one had broken its halter, and was kicking its mate.

Collie had no way of getting in, or probably he would have forced them to keep their stalls. However, he was given a larger breakfast than usual.

MARY E. SMITH.

AN EVIDENCE OF INTELLIGENCE.

In the month of May last summer, as I was strolling along one day, I was suddenly startled by the whinney of a horse in the wood, which I had just left. While waiting to hear it again, the horse came over to my side of the wood and on seeing me came running toward me, whinneying very loudly. She then ran back into the thicket, but was only a short time in returning her visit again, still whinneying, and appearing to be in much distress. This, of course, caused me to investigate the matter, and on entering the thicket only a few rods, greatly to my surprise, I was soon busily engaged in taking her poor little unfortunate colt, nearly dead from starvation, out of a deep hole. The incident plainly convinced me that its mother was possessed of intelligence enough to know that I could surely help her in this great time of trouble. **F. G. WILKIN.**

ANSWER TO MRS. JORDAN.

Dear Mrs. Jordan,—Dame Durden has forwarded me your request for the way to make quick bread. I am glad to be able to send the recipe, and hope you will have good success with it.

Quick Bread.—Peel and boil twelve medium-sized potatoes in sufficient water to have one quart when potatoes are done. Put three large tablespoonfuls flour, one tablespoonful sugar, one tablespoonful salt in a crock (about two-gal. size). Mix well together. Into this pour the boiling water from the potatoes, stirring briskly. Then add one quart boiling water, and one quart cold water. When cool enough, add two Royal yeast cakes, which have been soaked in one cup tepid water. Stir well; cover tightly with plate (not tin). Set crock in a warm place until the yeast is light. It will be ready to make bread next morning, and will keep for a week, or longer in cold weather.

To make bread, allow one and a half cups of the above yeast, and one and a half cups hot water (added very slowly) to each loaf required, as much ginger as can be lifted on point of teaspoon, and enough flour to make stiff batter. Beat well with spoon, cover up tightly; set in warm place. When light (in about one hour), add dessertspoon salt, and about the size of a walnut of lard (melted) to each loaf; flour to make stiff enough to handle without sticking to hands. After kneading the flour in well, about ten minutes, make into loaves, set to rise. When light, bake.

Added points: The rule I follow in regard to proper lightness is when the dough is twice the original bulk. Always have all dishes and flour warm. If there is not sufficient water on potatoes, add enough to make the quart. Salt to suit taste. Strain yeast when making bread to remove possible lumps.

ONE OF THE MAIDS.

and advertisements on this page, kindly mention the FARMER'S ADVOCATE.

With the Flowers

Early Spring "Doings."

We will suppose, now, that your seed-boxes have all been arranged, and that you are patiently watching the miniature brown beds for the first peep of the tiny green leaflet, or the little bent hoop of pink or green, which proclaims that the germination of the first seed has been successfully accomplished. In the meantime, what else is there to do? Think a minute. Have your Chrysanthemums been attended to yet? Or are they still down there in the cellar, where they have been dozing since New Year's, gathering strength for their summer's growth? If so, remember that they have slept long enough. Bring them up; cut off all old stems that may be left; water with tepid water, and set them in the warmest, sunniest window you own. They will soon respond to your care by sending up a veritable forest of fresh, green sprouts, which you may let grow until it is warm enough outdoors to admit of your taking up the whole root and planting it out in the garden for the summer.

If, however, you want the very finest results next fall, try this plan with a few of the sprouts. When they are about four inches high, clip them off with a sharp knife slantwise, as close to the ground as possible, and plant them in shallow boxes of pure, clean sand, which should be kept continually wet. Set away for a few days in a shaded place until root growth begins, then move to warmer, brighter quarters. When well rooted, say in about two weeks, transplant to very small pots filled with good rich loam, moving again, when necessary, to larger pots. Finally, when the weather is warm, plant out in the open ground, and give plenty of water, until it is time to re-pot in the fall again. Begonias may be rooted in somewhat the same way by laying leaves flat on the sand, and covering up the stem ends with it.

In March also, bring up any Geraniums, Fuchsias, Roses, Lemon Verbenas, etc., which have been kept resting in the cellar for summer blooming; re-pot in good soil and start into growth again. Remember that tepid water is always best for watering. Tuberous Begonias and Gloxinias should also be brought up at this time and re-potted.

Dahlia lovers should not forget that, to secure a long blooming season in this northern clime, where frosts often come so early in fall, it is absolutely necessary to start the tubers in the house. The operation, however, is not difficult. Divide the tubers and plant in sand or loam, being careful to have the right end up. Keep moist, and when the weather gets warm set the boxes outside for a while each day, bringing them in, or covering them up at night. Then, when all danger of frost is past, transplant into the beds.

A great many people who have had plants flowering exhaustively during the winter make the mistake of expecting them to keep on growing during the summer just as though no tax had been made upon their vitality. As a result the growth becomes spindly or straggling, and when the next flowering season comes, there is nothing but disappointment. A lesson or two of this kind should teach one that a yearly time of rest is just as necessary for nearly all plants as the nightly period of sleep is for animals. In nature, plants get their rest either during winter as in the temperate zones, or during the hot dry seasons that visit most sections of the torrid regions. In caring for house-plants, we must strive to imitate these conditions as closely as possible; hence all Geraniums, Pelargoniums, Cyclamens, Cacti, etc., that have been blooming during the winter should be given their summer rest. After they have finished flowering keep a close watch on them, and as soon as the foliage gives any indication of dwindling or ripening off, begin to withhold the water supply gradually until finally just enough is given to keep the roots from dying out entirely. Set them away in a cool shaded place,

and keep there during the summer, then re-pot in the fall and force as rapidly as possible for winter blooming. Geraniums may be much benefited by being sharply cut back before the new growth begins. A continuous succession of Geranium growth may also be had, of course, if one chooses, by slipping and seeing to it that a number of young vigorous plants are always kept on hand.

FLORA FERNLEAF.

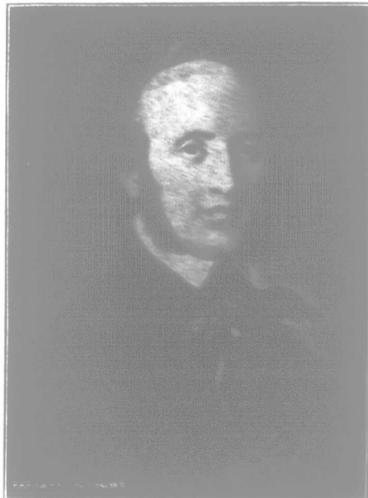
Mendelssohn.

Jacob Ludwig Felix Mendelssohn-Bartoldy.

Born, 1809; Died, 1847.

If there ever was a fairy prince in music, Mendelssohn must surely have been the one. Born of a cultivated Jewish ancestry and in refined surroundings, he represented that artistic type to which the world owes so much. His grandfather was the renowned philosopher, Moses Mendelssohn, his father though a money-getting business man, of a refined and lovable nature; his mother, a gentle lady, full of enthusiasm for the beautiful and noble.

Everything that affectionate care and wealth could procure for the promising boy was at his command, and so we have him at seventeen producing a master work, not only as good as anything he wrote later, but a masterpiece recognized by the musical world—the overture to the "Midsummer Night's Dream."



Mendelssohn, 1809-1847.

Ten years later came the publication of six little pieces for the piano, "Songs without Words." These are still prime favorites.

All of the Mendelssohn works are characterized by sweet and pure melody, delicate harmonies and great finish of detail. Most of his orchestral overtures were written before he was twenty-one years old, and are full of fresh, boyish enthusiasm. The greatest of his works are his psalms and oratorios. "Elijah" is full of beautiful and noble effects, and "St. Paul" has great beauties, one of the chief being the soprano air: "Jerusalem, Thou that Killest the Prophets," one of the purest songs for church use ever written. "Oh, for the Wings of a Dove," from "Hear My Prayer," is one of the most beautiful church soprano pieces to be found. The melody, with its supporting harmonies, is an exact and poetic setting for the words. "The Wedding March" takes an important place, having been used by the world at large as a most suitable jubilation for voicing happiness at marriage ceremonies. Nine times out of ten it is played as the bridal pair pass out of the church. The combination of joyful pomp and lingering sentiment make it a masterpiece.

Among Mendelssohn's close friends and companions, were his sister Fanny, who married the famous painter, Henselt;

Carl Von Weber; the poet, Goethe; the philosopher, Dr. Humboldt; Chopin, and the Schumanns. The latter friends he met in Leipsic, where it may be said that Mendelssohn founded the famous Conservatory of Music.—Adapted from "The Great in Music," and "Masters of Music."

THE LEAVENWORTH CASE

By A. K. Green.

CHAPTER XXII.—Continued.

"I know it, and for that reason I have come to you for such assistance as you can give me at this stage of the proceedings. You are in possession of certain facts relating to this man which it concerns me to know, or your conduct in reference to him has been purposeless. Now, frankly, will you make me master of those facts; in short, tell me all you know of Mr. Clavering without requiring an immediate return of confidence on my part?"

"That is asking a great deal of a professional detective."

"I know it, and under any other circumstances should hesitate long before proffering such a request; but as things are, I don't see how I am to proceed in the matter without some such concession on your part. At all events—"

"Wait a moment! Is not Mr. Clavering the lover of one of the young ladies?"

Anxious as I was to preserve the secret of my interest in that gentleman, I could not prevent the blush from rising to my face, at the suddenness of this question.

"I thought as much," he went on. "Being neither a relative or an acknowledged friend, I took it for granted that he must occupy some such position as that in the family."

"I do not see why you should draw such an inference," said I, anxious to determine how much he knew about him. "Mr. Clavering is a stranger in town; has not even been in this country long; has, indeed, had no time to establish himself upon any such footing as you intimate."

"This is not the only time Mr. Clavering has been in New York. He was here a year ago, to my certain knowledge."

"You know that?"

"Yes."

"How much more do you know? Can it be possible that I am groping blindly about for facts which are already in your possession? I pray you listen to my entreaties, Mr. Gryce, and acquaint me at once with what I want to know. You will not regret it. I have no selfish motive in this matter. If I succeed, the glory shall be yours; if I fail, the shame of the defeat shall be mine."

"That is fair," he muttered. "And how about the reward?"

"My reward will be to free an innocent woman from the imputation of crime which hangs over her."

This assurance seemed to satisfy him. His voice and appearance changed; for a moment he looked quite confidential. "Well," said he, "and what is it you want to know?"

"I would first learn how your suspicions came to light on him at all. What reason had you for thinking a gentleman of his bearing and position was in any way connected with this affair?"

"That is a question you ought not to be obliged to put?"

"How so?"

"Simply because the opportunity of answering it was in your hands before ever it came into mine."

"What do you mean?"

"Don't you remember the letter mailed in your presence by Miss Mary Leavenworth during your drive from her home to that of her friend in Thirty-seventh Street?"

"On the afternoon of the inquest?"

"Yes."

"Certainly, but—"

"You never thought to look at its superscription before it was dropped into the box."

"I had neither opportunity nor right to do so."

"Was it not written in your presence?"

"It was."

"And you never regarded the affair as worth your attention?"

"Whatever I may have regarded it, I did not see how if Miss Leavenworth

chose to drop a letter into a box with her own hands I could in any way prevent her."

"That is because you are a gentleman. Well, it has its disadvantages," he muttered, broodingly.

"But you," said I; "How came you to know of it? Ah, I see," remembering how the carriage in which we were riding at the time had been procured for us by him. "The man on the box was in your pay and informed, as you call it."

Mr. Gryce winked at his muffled toes mysteriously. "That is not to the point," he said. "Enough that I heard that a letter which might reasonably prove to be of some interest to me, was dropped at such an hour into the box on the corner of a certain street. That coinciding in the opinion of my informant, I telegraphed to the station connected with that box, to take note of the address of a suspicious-looking letter about to pass through their hands on the way to the General Post Office, and following up the telegram in person, found that a curious epistle addressed in lead pencil and sealed with a stamp, had just arrived, the address of which I was allowed to see—"

"And which was?"

"Henry R. Clavering, Hoffman House, New York."

I drew a deep breath. "And so this is how your attention first came to be directed to this man?"

"Yes."

"Strange. But go on—what next?"

"Why, I next followed up the clew, of course, by going to the Hoffman House and instituting enquiries. I learned that Mr. Clavering was a regular guest of the hotel. That he had come there direct from the Liverpool steamer about three months since, and registering his name as Henry R. Clavering, Esq., London, had engaged a first-class room, which he had kept ever since. That, although nothing definite was known concerning him, he had been seen with various highly respectable people, both of his own nation and ours, by all of whom he was treated with respect. And lastly, that while not liberal, he had given many evidences of being a man of means. So much done, I entered the office and waited for him to come in, in hopes of having an opportunity to observe his manner when the clerk handed him that strange-looking letter from Mary Leavenworth."

"And did you succeed?"

"No; an awkward gawk of a fellow stepped between us just at the critical moment, and I missed seeing what I wanted to. But I heard enough that evening from the clerk and servants of the agitation which had been observed in him ever since he received it, to convince me that I was on a trail worth following. I accordingly put on my men, and for two days Mr. Clavering was subjected to the most rigid watch a man ever walked under. But nothing was gained by it; his interest in the murder, if interest at all, was a secret one, and though he walked the streets, studied the papers, and haunted the vicinity of the house in Fifth Avenue, he not only refrained from actually approaching it, but made no attempt to communicate with any of the family. Meanwhile you crossed my path, and with your determination incited me to renewed effort. Convinced from Mr. Clavering's bearing and the gossip I had by this time gathered in regard to him, that no one short of a gentleman and a friend could succeed in getting at the clew of his connection with this family, I handed him over to you, and—"

"Found me rather an unmanageable colleague."

Mr. Gryce smiled very much as he might have done if a sour plum had been put in his mouth, but made no reply; and a momentary pause ensued.

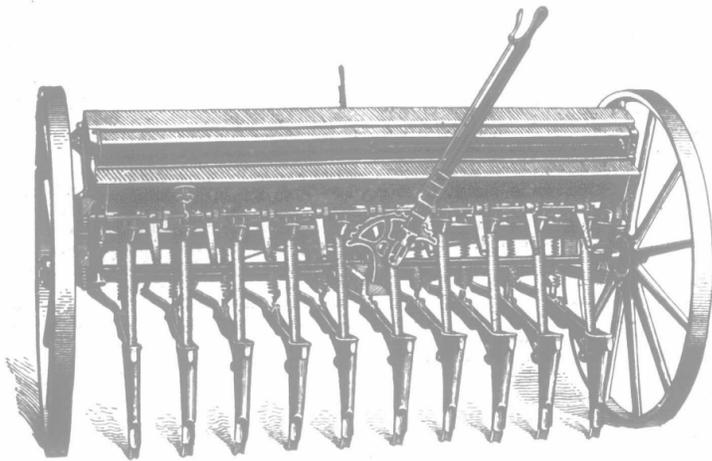
"Did you think to enquire," I asked, "if anyone knew where Mr. Clavering had spent the evening of the murder?"

"Yes; but with no good result. That he was out during the evening they all agreed upon; also that he was in his bed in the morning when the servant came in to make his fire; but further than this no one seemed to know."

"So that, in fact, you gleaned nothing that would in any way connect this man with the murder, except his marked and agitated interest in it, and the fact that a niece of the murdered man had written a letter to him?"

(To be continued.)

Binders, Mowers, Drills, Reapers, Cultivators, Harrows, Discs, Rakes



The Noxon Steel Hoosier Drill—the Best made.

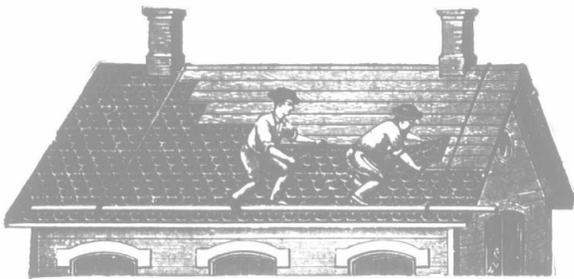
Agents at all points.

Write for Catalogue.

The Noxon Co., Ltd.

INGERSOLL, ONT.

Pedlar's Steel Shingles and Siding



At \$2.00 per 100 Square Feet

We have a complete assortment of Sheet Steel Roofing and Siding, suitable for all kinds of buildings, including plain Brick, Rock-faced Brick, or Stone Siding, at \$2.00 and \$2.35 for Painted Steel, and \$3.50 and \$3.65 for Galvanized Steel. Steel Shingles in Two Styles and Six grades, varying in price from \$2.50 per square for Painted to \$4.50 per square for best galvanized.

Absolutely Wind, Water and Storm Proof.

Nothing on the market compares in price and durability to our Sheet Steel Building Materials. Over 5,000,000 Square Feet sold in 1904. Write for Catalogue No. 11 describing all grades. State requirements, and special prices will be given.

Pedlar People, Oshawa, Ont.

Mr. Thomas Graham, President, Port Perry, Ont., writes: "The Provincial auction sale, to be held at Port Perry, March 14th, will include some grand specimens of Shorthorns, such as young bulls of breeding age, and two years old, thick-fleshed, well grown, and all of good rich colors and fine forms. The females are of some ten years old. Those of breeding age, whether in calf or have calved, are among them, are some of the best. Among them are some of the best young and heifers that would make good foundation stock for any person wishing to start a

herd of pure-bred Shorthorns; they having been bred and contributed by such noted breeders as John Davidson, Ashburn, Colwill Bros., Newcastle; Wm. Ormiston, Columbus; W. E. Dyer, Columbus; J. W. Disney, Greenwood; T. C. McAvoy, Balsam; Sam Johnston, Ashburn; John Duff, Myrtle; James Jackson, Seugog; Thomas Redman, Port Perry; James Leusk, Greenbank; Thomas Graham, Port Perry; Wm. Pollock, Seugog; J. McRoberts, Shirley; Alex. Jeffrey, Wharby; John McKenzie, Columbus, all of whom are up-to-date in breeding Shorthorns, as the stock on day of sale will show."

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

GOSSIP.

Mr. J. G. Clark, of Ottawa, breeder of Ayrshire cattle and owner of the herd which made such a grand prizewinning record for itself and for Canada at the World's Fair at St. Louis last year, advertises for sale 25 head of young Ayrshires from four to twenty months old, sired by his first-prize bull at the World's Fair, and from cows named in the milk-and-butter record of his herd; twenty of which averaged in 1904, of milk, 8,350 lbs. each, and of estimated butter, 369 lbs. each. Nine cows from this herd have won in the last three years in dairy tests: five firsts, three seconds, one third, and two fourth prizes. Until now, no heifers have been offered for sale, but the herd has grown so large that now males and females will be sold as required.

GEO. JOHNSTON'S SHORTHORN SALE.

Prominent among the public sales announced for the present month is the dispersion of the good herd of Shorthorns belonging to Mr. Geo. H. Johnston, of Balsam, Ont., to take place at his farm, near Claremont, C. P. R., on Thursday, March 23rd. Here has been quietly and unostentatiously built up a herd bred on intelligent lines with good females of many of the best Scotch families and some of the best old sorts, all of which have had the benefit of imported and home-bred bulls of first-class character and breeding, with the result that the cattle, which have been generously fed and cared for without being pampered or coddled, have been brought to a uniform type, that of the low-set, thick-fleshed class that mature early, while many if not most of the cows are good milkers and good breeders. Few herds in Canada, indeed, have had the use of as good a class of bulls; the farm being near to that of Mr. Arthur Johnston, of Greenwood, his best imported bulls were often used, while some of the best he ever sold were purchased and used in the herd, including those grand sires and individuals, Royal Sovereign (imp.) and Merryman (imp.). The present stock bull, included in sale, Imp. Choice Korral, by Duthie's Choice, coming two years old the day of sale, is richly bred, and a splendid animal individually, while the females well represent many excellent Scotch-bred families. Those interested who have not received the catalogue, should lose no time in applying for it.

THE GREAT AYRSHIRE SALE.

In addition to the 48 head of high-class Ayrshire cattle advertised to be sold by auction on March 22nd from the great herd of Mr. Ogilvie, at Lachine Rapids, near Montreal, Messrs. Robt. Hunter & Sons, Maxville, will contribute, to be sold at the same time and place, 16 head from their excellent herd, including the imported two-year-old bull, Garclough Royal Edward; five yearlings, one imported, and six bull calves, born in August and November last, all sired by Imp. Lessnessock King of Beauty, and out of imported cows. This contingent will make the offering still more attractive, and this sale should prove an event of great interest to dairymen and farmers throughout the Dominion and the United States. The offering from the Rapids farm herd, as announced in Mr. Ogilvie's advertisement, includes 11 young cows, imported and home-bred, all the two-year-old and yearling heifers in the herd, numbering 26, 17 young bulls, 9 of which are fit for service, and 8 bull calves, 7 to 8 months old, many of these young things having been prizewinners at the leading shows in Canada last year. The imported cow, Carsgowan March Bell, champion female of the breed at the Dominion Exhibition last year, is included. All the younger animals are sired by the three great imported bulls in service in the herd, and all the females of breeding age have been bred to imported sires. These cattle have been selected and bred for utility and dairy type combined, special care being observed to secure large capacity, shapely udders, good-sized, well-placed teats, and the most approved dairy conformation, in which the Ayrshire sets the standard to which breeders of all other dairy breeds are seeking and striving to bring their cattle, and the nearer to this they attain, the greater their usefulness and value.



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

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 60 cents.

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

SWAN RIVER FARM—My husband being deceased, and finding renting unsatisfactory, I offer, cheap, 320 acres first-class improved land. For further information write Mrs. N. Galle, Swan River, Man.

FARM HAND WANTED—Married or single, by the year; slate wages; none but good men need apply. Address, Farmer's Advocate, London, Ont.

A QUANTITY of pure spring ice for sale at the Asylum for Insane, London. Apply to the Bursar.

BUTTER factory for sale, with modern equipment, on railway, within easy reach of Ottawa; fine dairying country; capacity, 1,500 lbs. daily; in operation some years; offered as a going concern. Wood and ice supply on hand. F. X. Laderoute Real Estate Agent, 174 Bank Street, Ottawa, Ont.

TO LEASE—The Grenfell Creamery, for one or a term of years. A complete and first-class building and equipment, excellent district, where five or six hundred cows are kept. A splendid business for a live man. All information can be obtained by addressing W. H. Thompson, Sec. Grenfell Creamery Ass'n., Grenfell, N.-W. T.

A SPLENDID opportunity to right man. Every man who wants to establish a well-paying business in his county by investing \$200 or more, address Mr. Chas. Rumpf, 360 Main St., Rochester, New York.

IRRIGATED farm for sale in Southern Alberta, good buildings; ditches all in; near school; six miles from town. Excellent reason for sale. Apply for particulars to A. M. Marshall, Minot, N. D.

WOODROFFE AYRSHIRES

25 head for sale, 4 to 20 months old, from cows named in my herd record, and sired by 1st-prize bull at St. Louis World's Fair. YORKSHIRE SWINE of best breeding always on hand at moderate prices. Terms to suit purchasers. Inspection invited.

J. G. CLARK, - Ottawa, Canada.

MR. HOWDEN'S SALE.

The dispersion sale on March 22nd of the entire herd of Shorthorn cattle and stock of Clydesdale mares and fillies, besides other stock and farm implements, belonging to Mr. W. G. Howden, of Columbus, Ont., near Myrtle Station, G. T. R. and C. P. R., will afford an excellent opportunity to secure at the buyer's own price the most useful class of dual-purpose cattle and farm horses. A review of the pedigrees of the cattle reveals that an unusually good class of sires have been used in the herd for many years, both from the view point of breeding and individual merit. A list of these sires was given in our notice of this sale in last week's issue, and it is only necessary to add that the use of such bulls could not fail, where reasonably good care has been given, to mould the type and character of the herd to the most approved type, as we are assured these cattle are. The foundation stock in this case were, as a rule, good-milking cows, and the same quality shows strongly in the herd yet, while the top-crosses have been Scotch-bred bulls of the best beef type, many of them have deep-milking dams as well. The imported bull, Meadow Lord, included in sale, is of the excellent Kilblean Beauty tribe, noted for its good milking qualities. Mr. Willis' great cow, White Heather, of this same family, three times champion female of the Royal Show of England, swings an udder like that of a dairy cow, and this feature of her make-up has carried her to the front in many a close contest. There are half a dozen young bulls in the sale ready for service, sired by this grandly-bred bull, and these should be secured by farmers wanting the best class of dual-purpose cattle.

STEELE-BRIGGS SEEDS.—Now is the season to order farm and garden seeds, so as to have them on hand when wanted, and avoid any disappointment on account of failure or delay in filling orders of the varieties wanted. The Steele-Briggs Co., Ltd., of Toronto, is in an exceptionally good position to supply you with stock of the highest excellence, and widest assortment. Get their catalogue.

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.

WORMS IN COLTS.

Can you give proper treatment for worms in colts coming one year old? Mine have pinworms, I think, as colts keep rubbing their tails. E. A. O.

Ans.—Give half a pint of raw linseed oil and one to one and a half ounces of spirits turpentine (according to size and age) on an empty stomach, following in one hour with a hot bran mash. Repeat for three mornings, then give iron sulphate, dram doses, night and morning for eight days; then oil and turpentine as before. An enema (injection) of two ounces quassia chips, steeped in one quart boiling water, when cooled to blood heat, may be given once or twice a day.

CORN MEAL VS. FEEDING FLOUR.

Which is the better to feed fattening steers, corn meal or a good quality of feeding flour, corn or flour to be mixed with bran? A. B. X.

York Co., N. B.

Ans.—Unless the balance of your ration is very deficient in protein, we would expect decidedly better results from corn meal and bran. Even if using timothy hay or straw it would probably be well to add some protein by substituting for part of the corn meal a pound or a pound and a half a day of oil or cottonseed meal. Flour can rarely be used with profit by the stockman, though there is a kind—the lowest grade—known as "dark feeding flour," which usually contains the germs of the wheat grain, and is thus rich in protein and fat. Such flour has high feeding value, but the chances of getting it are not sure enough to warrant the average feeder in depending upon it.

DANGER FROM INCUBATOR LAMPS?

Is there any danger of an incubator lamp exploding and setting fire to your house? I have heard of one setting fire to a house, but the people did not know if the baby upset the lamp or it exploded. J. H. B.

Ans.—There is no more danger than with an ordinary house lamp. Always wipe all oil from the lamp. Never fill quite full, and do not go away leaving it flaming up too high. Now and then lift the screen that is around the burner and thoroughly clean all dust from it. Should the light flicker, see if the screen is not filled up with dust. The dust absorbs oil from the wick, and should the burner ever get hot enough to form gas, it will explode. All that is required to insure safety is ordinary attention and common sense.

GESTATION PERIOD—GREASE TO WOOL HORSE'S KEEP.

1. How long does a sow carry her young? Do they go longer than sixteen weeks?

2. How much grease for a pound of wool being sent to the mill to be carded?

3. If we hire a man who has a horse, and the agreement was for the horse to work for its board in summer, what is the usual charge for keep per month for winter months? J. J. C.

Ans.—1. As a rule, a sow that has had ample exercise and is in vigorous health, produces her litter at the expiration of 16 weeks from date of service, to a day or two, but fat sows that have had little exercise during winter occasionally run four or five days over that time.

2. One pound of grease to ten of wool.

3. It depends largely upon what amount of grain is fed. Liverymen state they have horses wintering with farmers, getting hay and one feed of grain per day, for one dollar per week. This may serve as a basis for deciding the question, if it is to be considered apart from the summer arrangement, which would appear to have been favorable to the employer.

TROUBLE WITH PIGS.

Young sow had ten pigs, three of them were dead. She had six living first, then one dead, and then one living and two dead. She was in a pen by herself for two months before farrowing. Pen was 5x8 ft., not very large, but always kept dry. This was her first litter. Would it be wise to breed her again? What was cause of the trouble? H. B.

Ans.—Lack of exercise was probably the cause. Yes, we would breed her again. Her next litter may be all right if she gets plenty of exercise.

GOSSIP.

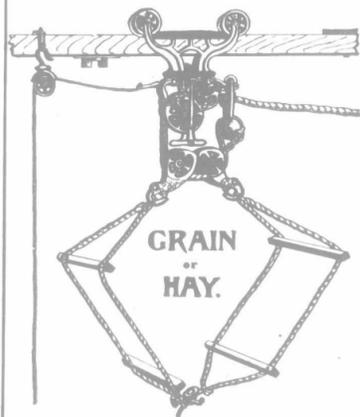
The catalogues for the Provincial auction sales of pure-bred stock at Ottawa, March 10th; Port Perry, March 14th; Campbellcroft, March 16th, and Guelph, March 22nd, are now ready for distribution. All entries were inspected before being accepted, in order to ensure a good class of animals being offered. They are all Shorthorns, except one Hereford bull and two Hereford females, which will be sold at Guelph. The number of head to be offered at the sales is as follows:

	Bulls.	Females.
Guelph	51	24
Port Perry	18	10
Campbellcroft	15	10
Ottawa	20	13

The dates of the sales are so arranged that it will be convenient for buyers to attend and purchase at each of the sales. Purchasers from a distance will be able to obtain stabling for a short time for any animals purchased, upon payment of cost of feed and care. One special feature this year will be the offering of prizes, in the shape of ribbons. Prizewinning animals will be sold first, and the ribbons will go to the purchasers. Following the prizewinners, the animals will be sold according to age; bulls first, and then females in the same order. Certificates and transfers and breeding lists will be supplied at the time of the sale. The secretaries of the sales are: E. McMahon, Ottawa; J. H. Brown, Port Perry; W. B. Campbell, Campbellcroft, and John McCorkindale, Guelph. Particulars and catalogues of the sales can be procured from any of these gentlemen, or A. P. Westervelt, Secretary Live-stock Associations, Parliament Buildings, Toronto.

A few days ago out field marshal called upon Mr. Hugh Thomson, who lives on the outskirts of the old stone town of St. Mary's, in Perth Co., Ont. Mr. Thomson has long been known as a discriminating judge, and one who is never satisfied unless he has some choice Shorthorns around him, and those he has now are no exception to the rule, although just a short time before our visit he had sold three cows, each with a bull calf by her side, namely: To H. J. Davis, Woodstock, a Crimson Flower heifer, with her calf by Springhurst =44864=, grandsire the Kilblean Beauty bull, Royal Prince (imp.); to Kyle Bros., Ayr, a red cow, by Scottish Beau, and a Cruickshank Lovely, with her calf by Velvet chief. This herd is headed by a young imported roan bull, Scottish Hero, Vol. 21, sire Marconi (81613), dam Bertha 7th, Vol. 57, E., by Sir James (82334), who was by the Miss Ramsden bull, Lord Lynedoch (74900). Scottish Hero's granddam, Bertha 4th, was sired by the Marr Missie sire, Murillo (71054). This young bull, as can readily be seen, carries with him a long line of good breeding, and he is quite as strong individually as his breeding indicates. He is an exceptionally even, smooth, thick in natural flesh bull. Among the young bulls that Mr. Thomson has for sale is the red and white Queenston Diamond =51761=, fourteen months old, from Queen's Diamond, by Imp. Derby. The sire of Queen's Diamond, Mina Duke =24317=, has a double cross of Cruickshank Victoria blood, through his sire, Indian Chief, the great sire of prizewinners. Another one that is ready for service is Wimple King 2nd, a dark roan, fourteen months old, sired by the roan Beauty bull, Diamond's Heir =43679=, dam Ida Wimple, by Royal George (imp.) 17106. Ida Wimple won second prize at London as a calf. This is a growthy fellow that also promises to be a very good one. Among the females is Miss Cloud, Vol. 18, sire Brawith King =12910=, a Snowdrop, with a nice heifer calf at foot by Velvet Chief, a show bull of Mr. Thomson's own breeding. Golden Queen, Vol. 19, a fine Golden Drop, by Scotchman =40420= (imp.), dam Golden Drop =20597=, has a choice red bull calf at foot, by Dundee =50472=, who is of the same family as Robbins & Sons' noted show bull. Another good roan cow is Lady Cloud, by Roan Cloud =31317=, by a Cruickshank Duchess of Gloster sire, has a fine bull calf at foot, by Velvet Chief. Mr. Thomson keeps only a small herd, and his ambition is to keep only good ones and keep them well.

ALL EYES ARE ON THIS INVENTION



Tolton's No. 5 Fork and Sling CARRIER

Unequaled for simplicity, durability, and efficiency. Thousands now in use, giving the best of satisfaction. All kinds of Slings, Forks and Carriers, suitable for wood or steel track—Send for descriptive circular or see our local agent.

TOLTON BROS., Ltd.
P. O. Box 476, GUELPH, CAN.

IMPORTED CLYDESDALES

One stallion, 5 years old, was the first prize horse at the Royal Show, Scotland, and is a foal-getter. For breeding he stands in with the best, being a half-brother to the famous Baron's Pride, sired by Sir Everard, while his dam is by the unbeaten show horse, Prince of Carruchan, by Prince of Wales, gr. dam by Top Gallant, g. gr. dam by Prince of Renfrew. Also mares, from rising one year up to brood mare in foal, with good quality and breeding. These horses were imported last October. Will sell on small profit.

WM. FULFORD, Heathcote P. O., Ont.
Thornbury Stn., G. T. R.

SPRINGHILL AYRSHIRES

We will sell by auction on the 22nd March, 1905, 11 young bulls, 5 of which are fit for service. Also 5 young cows and heifers. Sale to be held at **Lachine Rapids Farm**, and will take place right after the Ogilvie sale. For further information and catalogues, apply to **Robt. Hunter & Sons, Maxville, Ont.**

GOSSIP.

The demand for Shorthorn bulls at the Perth sale on February 21st was very animated, many of the animals being purchased for the Argentine. The highest price was 600 gs. for Captain Graham Stirling's first-prize yearling, the purchaser being Mr. Miller, while Mr. MacLennan gave 500 gs. for the second-prize winner, exhibited by Mr. Stewart, Millhills. Others made high prices. Mr. Colman bought one at 320 gs.; Mr. Hume, whose first-prize winner made 350 gs. to Mr. MacLennan, had an average of £273; Captain Graham Stirling, £245; Mr. Stewart, Millhills, £235. The average for 249 bulls was £49 11s. 11d., against £36 13s. 3d. last year.

THE REPOSITORY
Cor. Simcoe and Nelson Sts., TORONTO.



SPECIAL SALE
Imported Registered
Clydesdale Stallions and Mares

TUESDAY, MARCH 14, 1905
At 11 o'clock.

By instructions from Messrs. Smith, Rae & Greer, solicitors, we will sell on the above date **THREE STALLIONS and THREE MARES**, the property of **MR. JOHN INNIS, Aberdeen, Scotland**, trustee of the sequestrated estate of Telfer Forbes Ironside. These stallions and mares are a particularly fine lot, and can be seen at any time at The Repository up to hour of sale. The following is a partial list:—

"**THANE O'OLYDE**" (12388), black, foaled 15th June, 1899. Bred by I. Macdonald, Pennygowan, Campbelltown, Scotland. Sire "Gallant Prince" (10552), dam "Jess of Pennygowan" (9913), by "Prince David" (643).

"**TAM O'SHANTER**" (12387), bay, foaled 24th June, 1898. Bred by Wm. Gray, Shanter, Maypole. Sire "Prince Alexander" (8899), dam "Bonnie Jean" (11802) by "Harold" (2854).

"**GOLD LINK**" (11732), chestnut, foaled 22nd April, 1899. Bred by R. Sinclair, Scott, Burnside, Lays, Ayrshire. Sire "Prince of Johnstone" (9986), dam "Scottish Princess" (12916) by Prince of Cathcart" (89150).

"**LADY LOOKHART**" (11269), bay, foaled 19th April, 1889. Bred by I. M. McCaig, Barnuloch, Stranraer. Sire "Darnley's Hero" (5697), dam "Jean of Barnuloch" (4778) by "Derby" (227) (227).

Pedigrees and descriptions of two other mares not at hand at present writing, but expect to have same at time of sale.

Also on the above date, by instructions of Wm. Duncan, late of Westergreens and Redhill, Morayshire, we will sell the beautiful imp. Clydesdale stallion "**CHIEF OF THE HOUSE**" (12114), 5030, Vol. XIV., G. S. B., of Canada, dark brown, foaled June 1st, 1900, bred by Wm. Simpson, Burnside, Fochabers. Sire "King of the Roses" 19927, Vol. XVII., dam "Nayli" (3221, Vol. VII.), by "Boydston Boy" (111, Vol. I).

Extended pedigrees will be furnished on day of sale. The above are in first-class condition, and an exceptional opportunity is here afforded breeders and others interested to secure some of the very best Clydesdale blood ever offered in this country. Every lot will positively be sold without reserve.

120 HORSES, all classes, will also be sold on same date.

BURNS & SHEPPARD, Props. and Auctioneers.
The Repository,
Cor. Simcoe and Nelson Sts., TORONTO.

Note the advertisement of four imported Clydesdale stallions and three imported mares, aged four to six years, property of Scottish breeders, to be sold at auction, without reserve, on March 14th, at the Repository, Toronto, where also 120 horses of all classes will be sold on same date.

Lloyd Osbourne says that Robert Louis Stevenson once invited a friend to visit him in Samoa.

His friend said that nothing would give him greater pleasure, if he could secure the leisure to do so. "By the way, Louis," said he, "how do you get to Samoa, anyway?"

"Oh, easily," responded Stevenson, "you simply go to America, cross the continent to San Francisco, and it's the second turning to the left."

Bishop Ellison Capers, of South Carolina, recently addressed a meeting of Confederate veterans in Columbia.

In the course of his address Bishop Capers spoke of those men who deceived their wives, pretending that they are detained late at their offices on business, when really they are spending the evening at the theatre or the club.

"These men," he said, "are fewer than the comic writers of the press would have us believe, but, nevertheless, here and there, they do exist. I wish that they could all be caught as nicely as one of them, a resident of Columbia, was caught the other day."

He said to his wife, as he was leaving home in the morning:

"Oh, by the way, my dear, if I find I can't get away from the works in time for dinner to night, I'll send you a note by a messenger."

"The wife in a tart tone replied:

"You needn't bother. I have already found the note in your coat pocket."

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

GOSSIP.

A large Standard-bred stallion and a brood mare of same class, in foal, are advertised for sale by Dr. R. C. Coates, Thamesville, Ont.

An important auction sale of imported and home-bred Clydesdale mares and fillies is advertised in this issue of the "Farmer's Advocate" by Mr. Nelson Wagg, of Claremont, Ont., a station on the C. P. R., about 25 miles east of Toronto, to take place there on Thursday, March 16th. These are said to be an exceptionally good lot in breeding and quality, being sired by and some of them in foal to the best imported stallions in that district, which is famous for its high-class Clydesdales. Note the advertisement, and write for catalogue and particulars.

An important auction sale of 80 Shropshire and Dorset sheep, property of Mr. H. Alston Hamner, of Mount Vernon, Brant Co., Ont., is advertised in this number to take place on Thursday, March 16th, at his farm near Burford Station, on the Harrisburg to Tilsonburg branch of the G. T. R., about 9 miles from the City of Brantford. The offering includes a large number of breeding ewes in lamb to imported ram, and ewe and ram lambs of last year; also fifteen-months-old Shorthorn bull and two-year-old heifer in calf, registered Jersey and registered Ayrshire cow and other stock. The stock is of a very desirable class, and the sale affords a favorable opportunity to purchasers.

MR. GEO. FERGUSON'S SALE.

Attention is again directed to the important auction sale on March 17th of Shorthorn cattle, Clydesdale horses, Oxford Down and Leicester sheep and grade steers, property of Mr. Geo. Ferguson, Salem, Ont., near Elora, G. T. R. and C. P. R., 20 miles north of Guelph. The Shorthorns in this herd are deeply bred in the blood of those great sires, Bampton Hero and Royal Sailor (imp.), whose progeny have probably produced more prizewinners and champions at leading Canadian shows than any other two that could be named. The herd has also had the benefit of the services of the long list of first-class Scotch-bred bulls used in the noted herds of the Watts, of Salem, and the cattle are said to be of the right sort—thick-fleshed and up-to-date in type and quality. The Clyde mare, Lady Lyndoch, rising five years old, is by Master Lyndoch (imp.), a noted stock-getter in Wellington County, and is in foal to Red Duke (imp.), the only horse that ever beat in the showing the Toronto champion, Young McQueen. Queen Ella, rising three, is of fine quality, with clean, flat bone and fine hair, sired by Just the Thing (imp.), a horse of grand breeding and quality, and a fine stock-getter. The registered Oxford Down and grade Leicester sheep and steers should find ready buyers, the outlook for such stock being favorable. Teams will meet trains at Elora and also at Alma, G. T. R., on morning of sale.

WHEN ALL ELSE
HAD FAILEDDodd's Kidney Pills Cured His
Bladder Troubles.James Atwell Proves that Lumbago and
Bladder Troubles are Caused by Dis-
eased Kidneys.

Campbellford, Ont., March 6.—(Special.)—That Lumbago and Bladder Trouble are both caused by diseased kidneys has been shown in the case of Mr. James Atwell of this place. Mr. Atwell says:

"I had Lumbago and Bladder Trouble. In passing my urine would hurt me so as to almost cause tears to come to my eyes. I used medicines and a treatment prescribed by my doctor but got no relief. Then I tried Dodd's Kidney Pills and they cured me for good and all. I will never be without Dodd's Kidney Pills in the house."

"Give your Kidneys with Dodd's Kidney Pills and they will strain the causes of Lumbago, Rheumatism, Dropsy or Bladder Troubles out of the blood."

SEEDS.—Now is the time to look after the clover and grass seeds to be sown this spring. Wm. Rennie, of Toronto, puts up specially-branded packages of guaranteed high-class seeds. See his advertisement in this issue.

Mr. W. D. Flatt, Hamilton, Ont., has sold to Mr. Alex. Giffen, of Snelgrove, Peel County, Ont., the red yearling Shorthorn bull, Royal Mistletoe, sired by the Duthie-bred Lord Mistletoe (imp.) (81522), of the Marr Missie tribe, conceded to be the most popular in Scotland, dam Princess Royal 21st (imp.), of the favorite Cruickshank Princess Royal family. Lord Mistletoe was sired by the noted Broadhooks bull, Lovat Champion (78948), bred by Lord Lovat, winner of first-prize at Inverness Show in 1899 in a large class, and of the Shorthorn Society's prize, and heading the winning group. The dam of Royal Mistletoe was by Life Line, of the celebrated Inverquhomery Augusta family, bred by Mr. J. Bruce, a family which has furnished many Smithfield winners. Royal Mistletoe is of the early-maturing type, full of quality and good enough to use in any herd. Mr. Giffen is to be commended for his enterprise in taking a bull of such high-class character into his district.

A TRIO OF SHORTHORN SALES.

Three important dispersion sales by auction of high-class herds of Shorthorn cattle in Ontario are advertised in this paper to take place on the 21st, 22nd and 23rd days of this month, in the following order: On the 21st, the noted herd of Goodfellow Bros., of Macville, near Bolton, C. P. R., 25 miles north of Toronto; on the 22nd, the old-established herd of W. G. Howden, Columbus, near Myrtle Station, on C. P. R. and G. T. R., 35 miles east of Toronto, and on the 23rd, the excellent herd of Geo. H. Johnston, of Balsam, at his farm near Claremont, C. P. R., 29 miles east of Toronto. These sales can conveniently be attended in succession at practically the expense of one trip, and it is seldom that so many good cattle of the best type are offered under circumstances affording so good an opportunity to make a selection. There should be a good attendance at these events. The cattle are needed all through this country for the improvement of our stock, and the present is a favorable time to buy, as there are no fancy prices expected, and the animals will go at the buyers' prices.

THE JERSEY SALE.

It is not often that a herd of Jerseys is offered at auction in this country, and the dispersion of the Ettrick herd of Mr. W. G. Laidlaw, of Wilton Grove, near London, Ont., is only being effected owing to the sale of his farm, he having decided to join the exodus to the prairie lands of the West, for more elbow room for his family. The sale, which takes place March 15th, as advertised, includes among many good ones, the beautiful, five-year-old cow, Cream Cup Pride 141239, winner of sweepstakes at the Western Fair, London, and her son, born in August last, will be in the show-ring as under a year at the big fairs next fall, and promises to be a winner in any company. The grand imported cow, Helen Varick, has also a heifer calf, born in August last, that gives every promise of being a prizewinner, being of perfect dairy conformation, and these grand cows are bred to calve again in August, so that show calves may be looked for again. The stock bull, Columbine's Coronation King, in his two-year-old form, is a show bull of the first rank, and richly bred, his dam, the grand imported cow, Uncle Peter's Columbine, being one of the very best in this country in form and function, while his sire is the son and grandson of Toronto champions, male and female. There are also a number of excellent young cows of richest breeding, deep in the blood of the noted high-producing St. Lambert and St. Helier families, and the best Tennessee strains, while the younger things have top crosses of the best of recent importations from the Island of Jersey, combining beauty and utility in the highest degree. Dairymen, farmers and town people wanting a family cow, and breeders looking for show stock, should attend this sale.

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

RENNIE'S BEST

XXX

RED CLOVER,
ALSIKE CLOVER,
TIMOTHY.Sold in Sealed
Cotton Bags
Only.XXX Clovers put
up as follows:15 POUNDS.
30 POUNDS.
60 POUNDS.
100 POUNDS.
150 POUNDS.Leading Merchants
Sell It.

COPYRIGHTED.—W. R.

Sow the best
XXX and keep
your farm free
of weeds.XXX Timothy put
up as follows:10 POUNDS.
25 POUNDS.
50 POUNDS.
100 POUNDS.
120 POUNDS.Ask for
RENNIE'S XXX.

SOLD IN SEALED BAGS.

Cleaned with Special and Improved Machinery and is
**ACKNOWLEDGED BY LEADING AUTHORITIES TO BE THE
HIGHEST GRADES OBTAINABLE.**

KEEP YOUR FARM CLEAN.

The greatest care has been exercised in the selection of these grades of Clover and Timothy Seeds, which are not only true to name, but the purest obtainable and of the highest germinating quality which the last harvest has produced. We believe our efforts to supply the best seed in the market will be appreciated, and the small additional expense, which we are obliged to ask for these high-grade seeds in advance of the price at which ordinary samples can be had, will not be considered a tax.

In order to avoid disappointment and prevent other seeds being sold as "Rennie's Best," we have adopted the plan of selling our High-grade Red Clover, Alsike Clover and Timothy Seeds in cotton bags, sewn and sealed with "XXX" across the sewn part of the bag. It can then be readily noticed when the bag has been opened—the XXX will be broken in the centre).

OUR RESPONSIBILITY CEASES WHEN THE
SEAL HAS BEEN BROKEN.

WILLIAM RENNIE, TORONTO, ONT.

Messrs. Robert Hunter & Sons, Maxville, Ont., announce in a special advertisement, and write: "We have arranged with Mr. Ogilvie to put in his auction sale, on March 22nd, from our herd 16 head of high-class young Ayrshires, in order to make the sale even more attractive to a wider circle of buyers. The lot is composed of one imported two-year-old bull, Garclough Royal Edward (imp.) 18746, and five yearlings, one of them imported in dam, Lessnessock Blucher—18532—, and six bull calves, dropped in August and November. They are all got by the already well-known imported bull, Lessnessock King of Beauty—16768—, and out

of imported cows. A fuller description of each will be found in the catalogue."

Note the offerings in this issue of Dugald Ross, Streetsville, Ont., who has for sale a number of Clydesdales, Shorthorns and Yorkshires. Mr. Ross has been shipping some good stock West lately, and has more of the same kind.

Clydesdales, Shorthorns, Yorkshires
For sale, a number of Clydesdale stallions and mares, Shorthorn bulls and heifers, Yorkshire pigs, five months old, Flatt's breeding, and delivered free in any part of Ontario in pairs not skin at \$25 per pair. Apply to
DUGALD ROSS, Streetsville, Ont.

Gossip.

MR. BEITH'S GREAT HACKNEY SALE.

Wednesday, March 29th, is the date of the great dispersion sale by auction of the Waverly stud of imported and home-bred Hackney stallions, mares and fillies and harness and saddle horses, belonging to Mr. Robert Beith, of Bowmanville, Ont., comprising the greatest aggregation of high-class horses of this class in America, including the male and female championships at the World's Fair, St. Louis, the Canadian National, Toronto, and the International, Chicago, and a long list of first and second prize winners throughout the classes at these great events.

The many-times champion and grand champion stallion of 1904, Saxon -97-, a brown, five-year-old son of the champion Imp. Robin Adair II., out of Fimber Pride (imp.), is the pride, not only of Canada, but of the continent, a magnificent horse in size, conformation, finish and action, a prince among his peers in any country, and a credit to the country that produced him, and to the judgment of Mr. Beith in securing and bringing him out to make a reputation for himself and for Canada as a horse-producing country. Saxon combines size, style and sensational motion in the highest degree, and is transmitting his splendid strength and quality to his offspring, and should prove a fortune to the purchaser who secures him.

Royal DREWTON (imp.) -218- is a chestnut three-year-old horse of fine style and splendid contour, with fine limbs and feet, and splendid carriage and action, and is a son of His Majesty, who was one of the best sons of the Famous Matchless of Londesboro. His dam, Bouquet (1033) was by the renowned Wildfire (1224). In 1904, Royal DREWTON was first at Chicago, and before importation, first at Market Weighton, where strong classes of the best in England are to be seen. He also took fifth place at the premier show of England, the London Hackney Show. Wadsworth Squire (imp.) -217- is a bright chestnut, in his three-year-old form, has the finest of legs and feet, splendid style and action, and is a particularly toppy horse, with the right kind of quarters, coupling, withers and crest, together with lots of substance and quality, which he comes by honestly, being a son of England's best sire, Garton Duke of Connaught, dam by the famous Driver (198). Ivanhoe -124- is a very promising bay three-year-old colt, bred by Mr. Beith. He is of the right conformation, the kind that are winning money in the showings, sire Squire Rickell, dam Imp. Florence. St. David (imp.), Vol. 22, E., -216-, a bright chestnut three-year-old, has won full honors for his age, shown only once in England, winning second at Market Weighton, first-prize junior championship at St. Louis, and reserve grand championship, first and reserve champion at Toronto, first and reserve champion at Chicago, 1904; sire Pres. Roosevelt (8266), dam Lady Pilkington, Vol. 22, E., by Pioneer (1088). He promises to be a horse of good size, is of clean-cut symmetry, typical Hackney conformation, character and action. Cliffe Rosador (imp.) -219- (8416) is a fine, upstanding chestnut, with white marks on face and four white fetlocks, with lots of substance and fine quality. He is developing into a mover of the most sensational kind, and gives every promise of becoming one of America's leading show horses. He was third at St. Louis, second at Toronto and second at Chicago. His dam was the dam of Cliffe Roberts, champion at Toronto in 1903. His sire is Rosador, a London, England, champion, and sire of the champion mare at London last year. Bred as he is, Cliffe Rosador can hardly fail to become famous as a breeder, and will be a credit to any community. Terrington Bellerophon is a colt of great promise, a bright chestnut with blaze and two white stockings, of good conformation and substance and great style and flashiness, a get of the good horse, Goldfinder 6th, by Danegelt, dam Terrington Bella Donna, by Contest. Lord Meltonby, Vol. 22, E., -215-, is a fine bay yearling, with star in face and white hind fetlocks, unbeaten as a yearling, winning first and reserve for junior champion at St. Louis, first at Toronto, also winner at London, Eng. He is sired by Langton Squire, dam Meltonby Nancy, by Prince Alfred, grandam by Danegelt. Mister Dooley is a promising dark brown, bred by Mr. Beith, is a colt of remarkable quality,

IMPORTANT AUCTION SALE
On Friday, March 17th, 1905

The property of **GEORGE FERGUSON, Salem, Wellington County, Ont.**, at his farm, 2 miles from Elora, G. T. R. and C. P. R., 1 mile from Alma, G. T. R., and 20 miles from Guelph, when will be sold without reserve

27 HEAD OF SHORTHORN CATTLE

25 Cows and Heifers and 2 bulls.

2 REGISTERED CLYDESDALE MARES

Rising 5 years old, sired by Master Lyndoch, grandam imported, in foal to Red Duke (imp.); 1 mare rising 3, by Just the Thing (imp.) dam by St. Gatien (imp.).

12 OXFORD DOWN EWES and 1 RAM

Registered; ewes supposed to be in lamb.

Bay Horse, rising 4 years; Black Mare, 7 years; 2 Grade Cows in calf. 28 Grade Steers, rising 2 year, 12 Grade Leicester Kwes, 1 Ram.

The Shorthorns are sired by, are in calf to, or have calves at foot by such noted Scotch-bred bulls as Scottish Beau (imp.), Royal Wonder, Scottish Peer, Royal Archer Canada, Prince Louis (imp.), Valasco 40th and others used in the herds of the Watts of Salem. Sale to commence at 1 p.m. sharp.

TERMS - \$12 an 1 under, cash; over that amount, 10 months' credit on approved joint notes, 5% off for cash.

Send for Catalogue.

THOS. INGRAM, Auctioneer. GEO. FERGUSON, Salem, Ont.

POSTPONED SALE

Our sale of PURE SCOTCH SHORTHORNS advertised to take place on February 16th was postponed owing to the railway blockade, and will take place on

TUESDAY, MARCH 21, 1905.

All trains on the Owen Sound Division of the C. P. R. will stop on the farm on day of sale.

GOODFELLOW BROS., Oak Lane Farm, MACVILLE, ONT.

GREAT AUCTION SALE

of Imported and Home-bred Registered

CLYDESDALE MARES and FILLIES

The property of **MR. NELSON WAGG, Claremont, Ont.**, to be held at his farm, half mile from C. P. R. station,

THURSDAY, MARCH 16, 1905.

Every animal is of large size, fine quality and choice breeding. The highest class lot ever offered at auction in Canada. Don't miss this sale. Write for Catalogue. Sale to commence at 12:30.

CAPT. T. E. ROBSON, Auctioneers. NELSON WAGG, Claremont, Ont.

AUCTION SALE

PURE-BRED JERSEY CATTLE (A. J. C. C.)

The property of **WM. G. LAIDLAW, Lot 11, Con. 3, Township of Westminster, six miles south of London, Ont., on**

WEDNESDAY, MARCH 15th, 1905.

Commencing at 1 o'clock p.m. This sale will include 17 head of pure-bred Jerseys (A. J. C. C.) that have been bred with care and are in excellent condition. Eight cows and heifers in calf; 3 cows, fresh; 1 stock bull, dam imported from Island of Jersey. The remainder yearlings and calves. A number of COTSWOLD SHEEP. Also all other FARM STOCK and IMPLEMENTS. As the proprietor has sold his farm, everything will be sold. For catalogue and further particulars, apply to

HUNT & McKEGUE, Auctioneers, London, Ont. WM. G. LAIDLAW, Prop., Wilton Grove, Ont.

IMPORTANT AUCTION SALE

To be held at **MAPLEHURST FARM, Mt. Vernon, Ont., THURSDAY, MARCH 16th, 1905,**

WHEN

80 REGISTERED SHROPSHIRE AND 80 DORSET SHEEP

Will be sold unreservedly. Comprising the following: 65 splendid SHROPSHIRE breeding ewes, mostly one and two years old, in lamb to a son of Marauder, of Mansell breeding. 10 good ram and ewe lambs. 6 very choice DORSET 1-bearing ram. 4 hearing ewes. 1 three-shear ewe. At the same time will be sold a choice SHORTHORN HELL, 15 months old; a choice registered SHORTHORN BEEFEE, two years old, in calf; JERSEY COW (registered in A. J. C. C.); AYRSHIRE COW (registered) and other stock. Sale commences at 1 o'clock. Morning trains met at Burford, G. T. R.

WELBY ALMAS, Auctioneer. H. ALSTON HANMER, Mt. Vernon, Ont.

SPRINGHILL AYRSHIRES BY AUCTION.

A consignment of 11 young bulls and 5 females will be sold along with the cow of W. W. Ogilvie's at Rapids Farm, on March 22nd.

Robert Hunter & Sons, Maxville, Ont. Farm one mile from Maxville Station on C. A. R.

CLEAR SPRING STOCK FARM HIGH-CLASS SHORTHORNS

Especially. Present offerings young bulls and heifers from first-class stock. Correspondence or inspection of herd invited.

JAS. BROWN, Thorold Sta. & P. O.

with a sharp, clean-cut style that will recommend him to purchasers. He is a choice colt of fine action, sire the good breeding horse, Alarm -134-, by Wildfire, dam Lady Brookfield, by Cadet (imp.). Lady Brookfield was the dam of the winner at the Ottawa Winter Fair, 1904, Toscar, who went to the Argentine at a good figure. Vanguard -191- is a fine brown colt with ratch on face, and near fore and hind feet white, a colt of good conformation and action, the kind that many are looking for, and one sure to command fast bidding. He is by Alarm, dam Cherry Ripe -70-, by Jubilee (2122), grandam Mona's Queen, by Lord Derwent 2nd, great-grandam Mayflower (imp.), by High Flyer. Royal Ganymede is a fine chestnut colt of great promise, a get of Ganymede 2nd, dam Roseberry, grandam by old Valentine. Among the colts is to be noticed a brown, Sir Wilfrid, with a star and white hind fetlocks, that reminds of the champion Saxon, in style and action, a colt that will be heard from in the future. He is a son of Lady Brookfield, the dam of a number of good ones, but none of more promise than this one. Space will not permit of mention in this issue of the many high-class mares and fillies in the sale, to which reference may be made in our next. In the meantime, we advise applying for the catalogue, which tells the story of the great stud more fully than is possible in this space.

Mr. Will A. Dryden, of the firm of John Dryden & Son, Brooklin, Ont., writes: We have lately shipped two young bulls to the Northwest. One, imported last year and a very promising calf, is straight, long and wide, with good Shorthorn character, and is full of the best Cruickshank blood. He goes to Messrs. A. & G. Mutch, of Lumsden, to cross on his Cruickshank cows, and we look for splendid results from this mating. Two others are sold to go to the West later in the year. We still have four unsold, all of Cruickshank breeding, and among the best of the lot - one a Lavender, one a Clipper, and one an Easthorpe, and all fit to go to head any herd. A few weeks ago we had a short visit from Hon. W. C. Edwards, of Rockland, who many years ago purchased some good Shorthorns from our herd, among them being the imported bull "Pioneer," bred by E. Cruickshank, and used for some time with great success in his herd. In a recent letter to the senior member of our firm he states, first in reference to the Maple Shade barn, the basement plan of which lately appeared in your valuable journal: "I had previously heard very good accounts of the new barn, and was not by any means disappointed in my expectation of it. It is a grand, good building, and I do not see how you could very much improve on it, if indeed you could improve on it at all. I think it is the best all-round building I have seen, and the plan is suitable for either the small or the large farmer." In writing of the cattle and sheep, he states: "As to the Shorthorns and Shropshires, you know it is a number of years since I had the pleasure of visiting 'Maple Shade' before, and from statements I had heard from time to time, I had received the impression that the grand old herd at 'Maple Shade' had somewhat deteriorated; that the animals had declined in symmetry and general character, and that the old-time herd of Shorthorns was not to be found there. But when I had an opportunity of looking over the animals this false impression was very quickly dispelled, for I must say, my opinion is that the herd looks as well as it ever did, and this is saying a good deal. The young bulls are a fine lot, and very uniform. I do not think I ever saw a more uniform lot, and if the product is any evidence of a good sire, then it would appear to me that 'Maple Shade' has at present an exceptional sire in its chief stock bull, 'Prince Gloster,' and what I have said of the Shorthorns equally applies to the Shropshires. The flock seems to me to have been well maintained and in fine condition." This voluntary expression of satisfaction of the work carried on at 'Maple Shade,' and coming from so independent a source, is very much appreciated by us, and will be long remembered. Our lambs are coming in good numbers, and thriving well. We could spare a half dozen beautiful imported ewes, safe in lamb, and at a reasonable price.

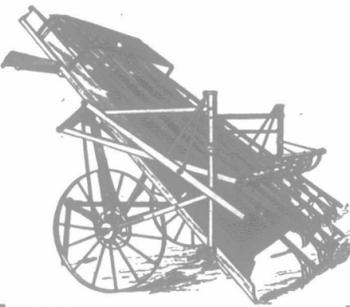
In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

HAY LOADER TALK No. 1

BY THE DAIN MAN.

Now is the time to get interested in Hay Loaders.

You have time to make a choice. In buying you buy the first that is offered, because you are in a hurry. We want you to look into the merits of the DAIN.



It is built for swath or winrow loading. It rakes clean as it goes along.

It is 8 feet wide on the ground, and 6 feet 6 where it delivers the hay.

It pushes the hay forward, and onto the load.

Doesn't pull any back like the Cylinder machine with a return carrier will.

We have seen it push the hay up on the load 5 feet higher than the Loader itself.

We have a lot of other good things to say about it.

Will tell you in our next.



In the meantime, send for circular.

That is, if you are going to buy a Loader this year, or next, for that matter.

We answer all questions cheerfully.

We're good-natured.

Our address is,

Dain Manufacturing Co.,
PRESTON, ONT.

TRADE TOPICS.

BIGG'S SHEEP DIP.—Bigg's Sheep Dip (powder), advertised in our March 2nd issue, page 292, should interest stockmen. The proprietors of Bigg's Sheep Dip are pushing the sale of their goods in all parts of the world. They are advertising in this paper for agents in Canada. The dip is supplied in powder form, done up in attractive packages. Users dilute it in water as directed. Their dips have been well and favorably known in England for 70 years. Parties interested should correspond with Bigg's Sheep Dip Co., 11½ Great Dover St., London, England.

SPREADING MANURE BY HORSE-POWER.—The manure spreader is a coming implement. We used to be content with the manure hook and fork, but then we didn't know any better. We would haul the manure to the field, dump it in piles, and then when it had got well dried and caked, we would tackle it with a four-tined fork and distribute in chunks of more or less fineness, generally less, especially if the hired man was tired. The modern way is to keep the hired man in the farmyard to fill the manure spreader, and then drive out to the field with three horses, and whilst you ride, spreading the manure at the same time much better than can possibly be done by hand. The Wilkinson Plough Co., Ltd., of Toronto, manufactures a machine to do it with. Write for particulars of the Great Western Endless Apron Manure Spreader, Do it now.

California Excursions.

The Chicago, Los Angeles and North-western Line runs through first-class Pullman and Tourist sleeping cars to points in California. Personally conducted excursions from Chicago every week; lowest rates; choice of routes; most scenery. Special attractions for family parties. For maps, rates, and rates, address B. H. Bennett, General Agent, 2 East King St., Toronto, Ont.

GOSSIP.

A German Coach stallion is advertised for sale in this issue by Messrs. Gordon, McRoberts and McLellan, of Glencoe, Ont.

Burdennett Stock Farm, Unionville, York County, Ont., about seventeen miles from Toronto, on the Midland division of the G. T. R., long known as the breeding ground of good Clydesdales, is now controlled by A. G. Gormley, formerly by his father. The stud is headed by Fullarton (Imp.) (9910), a horse of splendid conformation and substance, with good feet and pasterns, beautiful dark, dappled bay, by Prince of Kyle, the horse that brought \$10,000 as a two-year-old, dam Lily Buchanan (11695), by Go Ahead (5052), a horse that was exported back to Scotland for service. Among the mares are several imported ones of grand breeding and quality, perhaps the best of which is Imp. Beauty (4784), by Ornament, a premium horse, and champion winner in Scotland, dam Flora of Garthland (3973), by Darnley (222). This mare was a winner in Scotland over a Royal winner, and is said by many to be one of the best mares of the breed in America. She has been shown a few times, and has won several important premiums, among others first and champion at Ottawa, 1903, against strong odds. She is certainly well gotten up. Miss Todd (Imp.) 4785 is another good four-year-old, by King's Cross (10070), half-brother to Baron's Pride, dam Clarinda of Hillhurst 4852, by Lord Erskine (3603), is a mare with good feet and legs well placed under her. She is also a good actor.

Lady Minto (Imp.) 4772 is a very stylish filly that won first as a yearling at Ottawa. She is by Carbineer 4030, dam Lady Rothsay 4858, by Duke of Rothsay (9191).

One of Fullarton's get that is going to make a large, good quality mare is Queen of Maple Grove 6058, from Riverside Corinne 2957, by McMurchie (8014), by McGregor. She won second at Toronto last September, which practically means second against the world, and third at the winter Clydesdale and Shire Show in Toronto, in a class practically one year older than herself. Madge of Hallcroft (Imp.) 4776 has never yet been beaten in the show-ring, Toronto Show included. She is by Ornament, he by Baron's Pride, his dam by McGregor, her dam, Ursula 13985, by Flashwood's Best (9211). Besides several other imported and Canadian-bred mares that are on hand, and that will be sold very reasonable, some of which are in foal to imported sires, there are some good foals in the rough, by the Unionville Syndicate horse, Hopewell (11375), whose sire was Prince Robert 7135, dam old Darling 7365, by Tom 877, a full brother to Hiawatha, whose stock has swept the show-rings in Scotland this season. Anyone wanting to get imported brood mares in this breed will consult his own interest by writing to Mr. Gormley, or calling at his stables to see what he has.

Settlers' Low Rates West.

Via the Chicago and Northwestern Railway every day from March 1st to May 15th, 1905. Settlers one-way, second-class tickets at very low rates from Chicago to points in Utah, Montana, Nevada, Idaho, Oregon, Washington, California, also to Victoria, Vancouver, New Westminster, Rossland and other points in the Kootenay district. Correspondingly low rates from all points in Canada. Write for full particulars and folders to B. H. Bennett, General Agent, 2 East King St., Toronto, Ont.

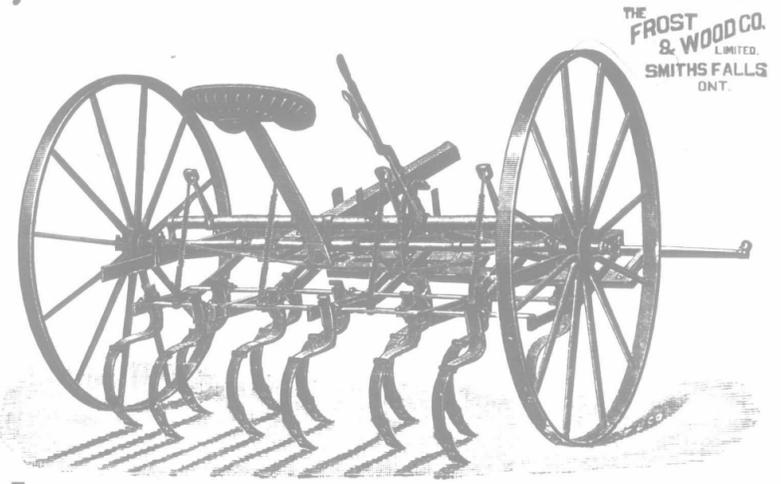
A CHANCE FOR THE SMALL POULTRY RAISER.—George H. Stahl, of Quincy, Ill., the old time incubator manufacturer, has sold hundreds of his famous 200-egg hatching to people who are making good money with them. Of course some do not succeed as well as others, but with a hatcher like the Wooden Hen, elements of risk are avoided, as it is guaranteed to hatch every fertile egg, and the price, \$12.80, is within the reach of everyone. The Stahl incubators have been on the market for years, and there are none better. Mr. Stahl issues a very attractive, interesting book on poultry raising, which is sent free to all who ask for it, and may prove the means of adding materially to the reader's income.

THE FROST & WOOD COMPANY LIMITED

Are building for 1905 a line of

Seeding and Cultivating Machinery

that will increase the production on your farm, and at the same time lighten your work.



THE FROST & WOOD CO. LIMITED, SMITHS FALLS, ONT.

Champion 12-Tooth Cultivator.

This Cultivator may be equipped with grain and grass seed boxes, and be used as a broadcast seeder. The teeth are of steel: the proper size and shape to do the best work. They are arranged in sections, and will adapt themselves to any condition of land.

Frost & Wood Hoe Drills, Seeders, Cultivators and Harrows

always satisfy the prosperous farmer: they are good machines. There's a reason for it—see our catalogue "F."

THE FROST & WOOD COMPANY LIMITED.

Head Office & Works, Smith's Falls, Ont.

Winnipeg, Toronto, Montreal, Quebec, St. John, Truro, Charlottetown.

You Can Kill Mustard Absolutely Free

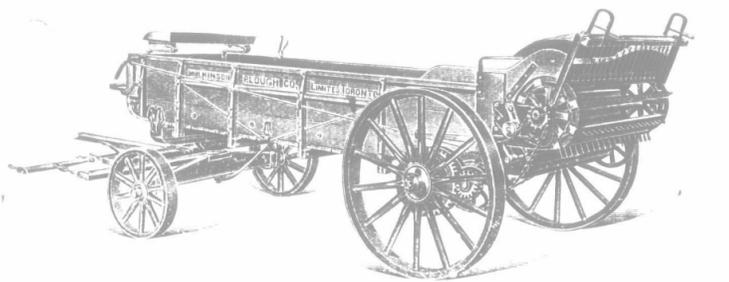
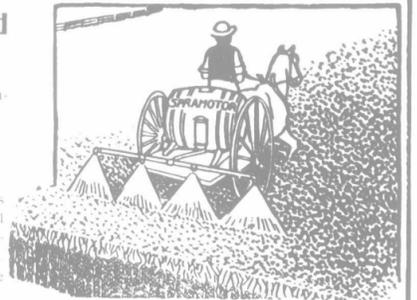
in a field of growing wheat without injuring the grain, through using the

Spramotor

The proof is positive and the results sure. The improvement in the crop will more than repay you for the trifling expense and the investment in the Spramotor. Write for full particulars; free Booklet D.

SPRAMOTOR CO., 68-70 King St., London, Ont.

Agents Wanted

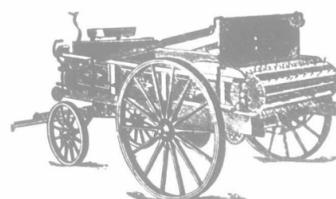
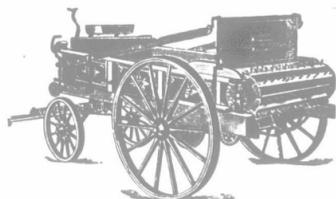


Great Western Endless Apron Manure Spreader

Has taken the lead everywhere. It is the most convenient and practical machine ever made. The ENDLESS APRON saves time and work. The wide tires with the fact that the wheels track make easy draft. Turns in its own length. Everything is ground fine; no bunches can possibly pass over. Write us for catalogue and handsome hanger FREE.

The Wilkinson Plough Company, Ltd.
TORONTO, CANADA.

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



A Smart Boy WITH A MASSEY-HARRIS MANURE SPREADER

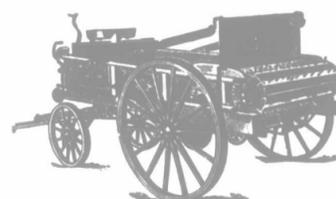
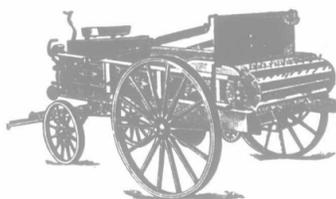
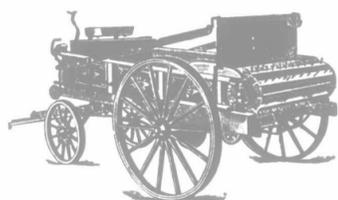
at work in your fields will give you a handsome balance in crop results at harvest. It will also double your land value. The Massey-Harris Manure Spreader doubles the value of your fertilizer to the soil. It gives best possible results in manure-spreading, as it is systematic and a great labor-saver. A smart boy will do more work and do it better than two men with the old-fashioned uneven method of hand distribution. It will pay you to inspect the merits of the Massey-Harris Manure Spreader.

Doubles your CROPS.

Doubles your PROFITS.

Doubles your LAND VALUE.

MASSEY-HARRIS CO., LIMITED
 TORONTO BRANTFORD WOODSTOCK STRATFORD



First Biennial Auction Sale

of the produce of THE FAMOUS OGILVIE HERD OF AYRSHIRES,
 to take place at Rapids Farm, near Montreal,

WEDNESDAY, MARCH 22ND, 1905

WHEN WILL BE SOLD

48 High-Class Young Ayrshires

including absolutely all the two-year-old and yearling heifers, numbering 23 head, and 17 young bulls, comprising 1 two-year-old and 8 yearlings fit for service, and 8 calves from 7 to 8 months old.

These young animals have already made a name for themselves, having won, last fall, 12 first prizes, 9 seconds, 8 thirds and two fourths, at the Dominion Exhibition at Winnipeg, and at Toronto, London and Ottawa.

There will, in addition, be offered 11 Grand Young Cows (imported and home-bred), from 3 to 6 years old, including the Champion Ayrshire Cow at Dominion Exhibition at Winnipeg, imported Carsegowan March Bell.

All the animals offered, except those that are imported, are by the three well-known Champion Stock Bulls Douglasdale (Imp.), Black Prince (Imp.) and Lessnessock Royal Warrant (Imp.)

SALE TO COMMENCE AT 1 P. M.

Mr. Ogilvie is very anxious to make these sales a success, and none but first-class animals will be offered.

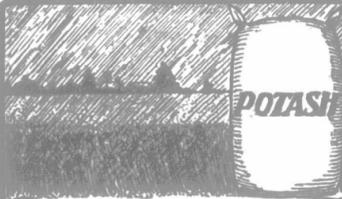
For further information and Catalogues apply to

Walter M. Kearns,
 Auctioneer, Montreal.

Robert Hunter, Manager,
 Lachine Rapids, Que.

One mile from electric cars. Take Ontario and Wellington Line to Verdun. Cars will be met on day of sale.
 LONG DISTANCE TELEPHONE MAIN 2228.

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



Potash as Necessary as Rain
The quality and quantity of the crops depend on a sufficiency of

Potash

in the soil. Fertilizers which are low in Potash will never produce satisfactory results.

Every farmer should be familiar with the proper proportions of ingredients that go to make the best fertilizers for every kind of crop. We have published a series of books, containing the latest researches on this all-important subject, which we will send free if you ask. Write now while you think of it to the

GERMAN KALI WORKS
98 Nassau Street, New York.

Only a Trifling Cold

Has been the Lullaby Song of Many a Victim to their Last Long Sleep.

A cough should be loosened as speedily as possible, and all irritation allayed before it settles in the lungs. Once settled there Bronchitis and Consumption may follow.

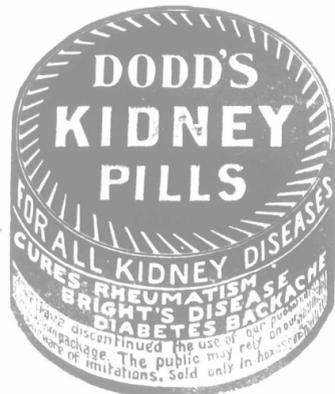
DR. WOOD'S NORWAY PINE SYRUP
is just the remedy you require.

The virtues of the Norway Pine and Wild Cherry Bark, with other standard pectoral Herbs and Balsams, are skillfully combined to produce a reliable, safe and effectual remedy for all forms of Coughs and Colds.

Mr. N. D. Macdonald, Whycomagh, N.S., writes:—"I think it my duty to let people know what great good Dr. Wood's Norway Pine Syrup did for me. I had a bad cold, which settled in my chest, and I could get nothing to cure it till I tried Dr. Wood's Norway Pine Syrup. The first bottle helped me wonderfully, and the third one cured me.

Price 25 cents per bottle.

In the olden days of whitewashed chapels, a minister went into the Little Bethel and found the workmen, with their caps on their heads, working their whitewashing brushes up and down the walls to the tune of "Pop Goes the Weasel." He was shocked. He said: "Take your caps off, and, if you must sing, sing hymns." The next day but one he found the brushes moving very slowly on the wall to the tune of "Before Jehovah's Awful Throne," and he saw that very little work had been done; so he said to the workmen: "Put on your caps and get back to the old tune, or we shan't have the place ready for Sunday." No doubt the whole incident passed without any sense of humor between them.



GOSSIP

Mr. L. E. Morgan, of Milliken P. O., in York County, Ont., a G.T.R. station 16 miles from Toronto, is a very enthusiastic breeder of Berkshire swine, and that he has acted wisely in selecting a foundation is without a doubt, having headed his herd with superior imported stock. The grandly-bred imported boar, Royal Kingston, heads the herd. He was sired by Orme (7119), in B.B.H.B., said to be the sire of many winners at the best shows in England, and is a son of the famous English champion, Highclere Topper, sold for \$600 to Mr. Vanderbilt, of New York. Royal Kingston's dam is Kingston Myrtle (8929), a daughter of the champion English boar, Grand Duke (7653). The blood of such famous sires as Jubilee Star, Dr. Jameson, and Grant of Orne, one of the largest boars in England, is included in his pedigree.

Among the sows we noticed a choice Canadian-bred one, Matchless, sired by Big Ben 10500, winner of first at Toronto in 1902; grandam Eclipse's Matchless, the champion of England and America, winning 22 first and champion prizes in one season. She is a sow of good length and quality, and is bred to Polegate Doctor (imp.), a winner at some of the best shows in England, now at the head of Geo. Thompson & Son's herd at Woodstock. Oakdale Sally is another choice young imported sow, bred by Lord Portman, of England. Her sire was the famous First Rank F., sire of many winners. This young sow is a pure Sallie on her dam's side, one of the choicest families in Berkshire history. Oakdale Ruby, imported in dam, was bred by the Duchess of Devonshire, and sired by Polegate Dragoon (9811), one of the leading boars in the herd. Her dam is Kingston Pansy (8933), of the Ruby strain, one of the most popular strains in England. Another one, imported from the same herd, is Oakdale Dawn, by same sire as above, dam Polegate Dawn. This beautiful young sow is a pure Compton on her dam's side. Imp. Oakdale Desire was sired by the noted Cecil Augustus 7756, her dam being one of the Compton strain. This young sow was a prizewinner in England, has produced a nice litter of pigs, and is bred again to the English champion and silver medal boar, Stratton King Clere. There are a few other imported-in-dam pigs, of both sexes, on hand, of the Duchess of Devonshire's breeding, that are expected to make good ones. This new herd has been founded upon the most fashionable strains, and we bespeak for Mr. Morgan a fair share of the patronage of our readers. Write him for description and prices.

QUESTIONS AND ANSWERS
Miscellaneous.

CONDITION POWDERS.

Would you please give me, through the columns of the "Farmer's Advocate," a good recipe for condition powder, for horses—something to purify the blood and increase the appetite? I. S.

Ans.—The following tonic is recommended: Two ounces each of ferric sulphate, pulverized gentian, pulverized nuxvomica, and nitrate of soda. Mix these, and give a teaspoonful night and morning in ground oats or bran. Also give two or three times a week a feed of boiled oats, and to the regular grain food add a little oil cake, which aids digestion. Give plenty of exercise.

Veterinary.

FIRING FOR BONE SPAVIN.

1. Would firing or blistering for bone spavin have an injurious effect upon a pregnant mare?

2. Would a like operation injure a sucking colt? W. K. H.

Ans. 1. The effect might be injurious. All operations should, if possible, be avoided in pregnant mares.

2. The only danger is the liability of the foal getting some of the blister on himself while rubbing against the mare, but this would not be serious. V.

WANTED!

SUGAR BEET CONTRACTS
THE ONTARIO SUGAR CO. LIMITED
1905
BERLIN, ONT.

SUGAR BEETS PAY.

OVER 800 GROWERS HAVE THUS FAR RE-NEWED THEIR CONTRACTS FOR THE COMING SEASON.

WRITE US FOR CONTRACT FORM

AND WE WILL SEND ONE FOR YOUR SIGNATURE, OR, SEE OUR CANVASSER IN YOUR DISTRICT AND HE WILL GIVE YOU FULL INFORMATION.

SUGAR BEET PULP IS OF VALUE

for Stock feeding and is given to beet growers in proportion to amount of Beets delivered.

WE PAY 50 CENTS PER TON

in Berlin for pulp, to any grower who does not wish his pulp for his own use for stock feeding.

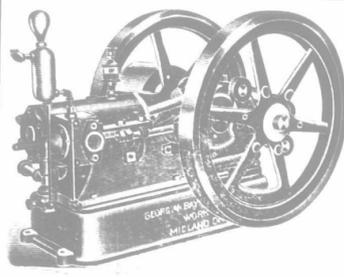
BEET SEED IS NOW READY

for growers and will be sent to the grower's shipping station.

SEND IN YOUR CONTRACT NOW.

THE ONTARIO SUGAR CO., LIMITED,
BERLIN, ONT.

IN SAVING HORSE FLESH



You are saving money.

The "Midland"
Gasoline Engine

saves the drudgery connected with the horse-power. You don't have to stand outside and freeze, and it costs less to feed a horse which is not working than it does one which is tugging on the sweeps. Then you don't have to dig the blamed thing out of the snow. Our 6-horse-power engine is meeting with approval among progressive farmers. Are you progressive?

Georgian Bay Engineering Works
MIDLAND, ONT.

ADVERTISE IN THE ADVOCATE

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

HUNTERS

Send for our Price List of cash for your Furs. Also our letter as to values. You miss an opportunity if you do not write at once.

REVILLON BROS., Ltd.
134 McGill Street, MONTREAL.

Sharple's Tubular Separators

The Only Modern Separator Bowl

Why buy a separator filled with bottomless cake pans, punched and bent sections of stove pipe, or other complicated parts?

The only modern bowl has no contraptions; is as simple, light and easily handled as any woman could wish. The illustration shows it.

Write for catalog K-193 and learn about the best and most attractive separator ever built—the Tubular.

Canadian Transfer Points
Winnipeg, Toronto, Quebec,
St. John, N. B., Calgary, Alberta. Address

The Sharple's Co. P. M. Sharple's
Chicago, Ill. West Chester, Pa.

Bone Spavin

Know it by the lump and the limp—a hard, bony growth on the inner side of the hock joint, usually low down and a little forward of the center of the leg—a quick hitch with the sound leg, and a stiff movement of the lame leg, bearing the weight on the toe, most noticeable in starting.

New cases, old and bad cases, the very worst cases, cases where fring has failed, are cured by Fleming's Spavin and Ringbone Paste. Guaranteed to cure the lameness for good—may or may not take off the lump. Easily used by anybody, and a single 45-minute application usually does the work—occasionally two required. Write for Free Horse Book before ordering. It gives all the particulars, and tells you what to do for other kinds of blemishes.

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

WE DON'T ASK YOU TO BUY AN EMPIRE CREAM SEPARATOR

on faith, but we do suggest that it is the part of wisdom to investigate our claims before buying any other.

It Costs You Nothing

to investigate, and it helps you to buy more intelligently. We only ask for a chance to show you. Send for name of nearest agent. Catalogue and dairy booklet free.



Empire Cream Separator Co.,
28 30 Wellington St.,
Toronto, Ontario.

Advertise in the Advocate AND GET BEST RESULTS.

GOSSIP.

Mrs. Burdett, the wife of the American humorist, says that, while touring in the Scottish Highlands one summer, she was taken to a cave in which Macbeth was said to have been born. She listened to the excellent speech of her guide. At the end she said to the man, "Come, now, tell me truly, is this really the place where Macbeth was born?" The little guide smiled awkwardly. He shifted about a little. "Weel," he said, "it's one of the places."

Bishop Thorold, at a dinner party, told the following story on his return from America. The chaplain of a large private asylum asked a brother clergyman to preach to the inmates on a Sunday during his absence. Before going away he said, "Preach your best, for though insane on some points, they are very intelligent." So he talked to them on India, and of heathen mothers who threw their dear little babies into the sacred river Ganges as offerings to their false gods. Tears streamed down the face of one listener, evidently deeply affected. When asked by the preacher afterward what part of the sermon touched his heart with grief, the lunatic replied: "I was thinking it was a pity your mother didn't throw you in the Ganges."

HOG NOTES.

Thrift, not hunger, should prompt exercise.

Sows that have very nervous temperaments should be avoided.

Growing pigs should have a dry, warm, bed, kept clean and free from dust.

Keep the fattening hogs away from the manure heap.

Wet stalls and sheds are always filthy, and filth breeds disease.

Do not make growing pigs' slops too rich, nor make too sudden changes in their diet.

Whenever a farmer feeds a pig beyond nine months, he is needlessly throwing away his profits.

If lean pork is desired, we must begin to cultivate the grazing hog, and the disposition to exercise must be encouraged.

The acid contents of an old swill barrel is not necessary to produce sweet and healthful pork.

Hogs can live in filth, and eat and drink filth for a while, but the chances are that they will not live so very long.

Close confinement being an unnatural condition to swine, it is liable to lead to sterility.

The brood sow should receive carefully selected and concentrated food, containing the full maximum of nutritiousness. You can help growing pigs along in two ways; one by feeding the sows liberally on milk-producing foods, and by learning the pigs to eat themselves.

So far as is possible it pays to keep old sows for breeding. They may be bred twice a year and will produce litters of constantly increasing value.

To give the pigs a good start in life, the sow must be well fed, both before and after farrowing. It is not necessary that she be fat, but very essential that she keep in good flesh.

Never let hogs or any other animals shift for themselves while young, and think you can make up for such neglect at the end.

A most excellent slop can be made of four parts wheat bran and one part linseed meal mixed dry and then made into slop with sweet skim milk.

Charcoal or coarse coal and wood ashes should always be kept where the hogs can reach them. It is one of the best preventives of worms.

A hog as well as any other animal will thrive best when its surroundings are clean. A clean, dry pen is a profitable investment.

Even with fattening hogs, it is a good plan to feed a liberal ration of good slop before giving the grain at each meal. But it should be rich and not simply dish water.

March is often a boisterous month, and if sows are to farrow during this month, especial care should be taken to provide warm, dry quarters.—Live-stock Journal.

ONTARIO Provincial Auction Sales

PURE-BRED CATTLE (REGISTERED)

MALES AND FEMALES OF BEEF BREEDS

Will be held by Local Management, under the auspices of the Live Stock Associations of Ontario, at the following points:

OTTAWA, MARCH 10

PORT PERRY, MAR. 14 CAMPBELL CROFT, MAR. 16

GUELPH, MARCH 22

All stock inspected before being accepted. Only good representatives of the various breeds will be offered. For Catalogues and full particulars, apply to

A. P. WESTERVELT

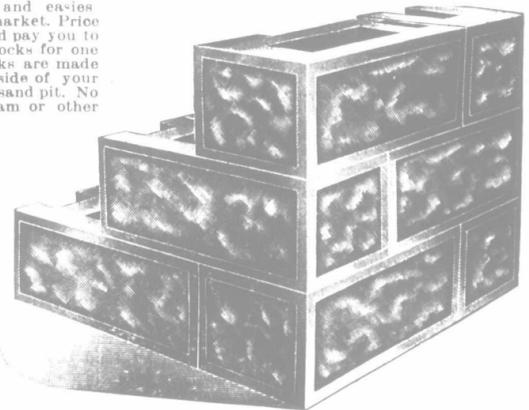
Secretary Live Stock Associations - Parliament Buildings, Toronto

Dunn's Hollow Concrete Block Machine

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

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

Write for particulars to



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

125 Percheron, Shire and Hackney . . Stallions and Mares . .

At the World's Fair at St. Louis I won more Premier Championship awards than any other exhibitor of live stock; I won every Premier Championship offered on Hackneys, also every Gold Medal but one. At Chicago International, 1904, on 20 head I won 34 prizes.

I HAVE THE GOODS and will pay intending buyers' R. R. fare here from any part of Canada, sell you a good Stallion for \$700 to \$1,000, or choice of my barns for \$1,400, delivered in your town. I will guarantee stallions. I will sell against death for two years, and to get 60% mares in foal.

Time of payments made to suit the purchaser.

LEW W. COCHRAN, 607 West Main St., Crawfordsville, Ind.

ALEX. GALBRAITH & SON,

JANESVILLE, WISCONSIN.



Large and fine collection of

CLYDESDALES

Also a few choice

Suffolks,
Percherons,
Belgians
AND
Hackneys

Prices, terms and guarantee to suit the buyer.

Twenty-five years in the front rank of importers. Address as above. Send for new Catalogue.

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

What To Do For Heart Trouble

I back up my advice with this Remarkable Offer:—A Full Dollar's Worth of my Remedy Free to Prove that I am Right.

I ask no reference, no deposit, no security. There is nothing to promise, nothing to pay—either now or later. To any heart sufferer who has not tried my remedy—Dr. Shoop's Restorative—I will gladly give, free, not a mere sample, but a full dollar bottle.

I am warranted in making this unusual offer because mine is no ordinary remedy. It does not vainly try to stimulate the heart. Such treatments are worse than useless. It goes straight to the cause of all heart trouble—the heart nerves—and strengthens them and vitalizes them and restores them. Then that is the end of heart diseases.

For the heart itself has no more self control than a common sponge. It is made to beat by a tender nerve so tiny that it is scarcely visible to the naked eye. Yet ten thousand times a day this delicate nerve must cause the heart to expand and contract.

The heart is about the size of your clenched fist. Open and close your fist a dozen times, even, and you will see the monstrous labor this little nerve must do.

The heart nerve is only one of the branches of the great sympathetic nervous system. Each branch of this system is so closely allied with the others that weakness or irregularity at any point is apt to spread. Heart trouble frequently arises from stomach trouble through sympathy, and kidney trouble may also follow. For each of these organs is operated by a branch of these same sympathetic nerves—the inside nerves.

The bond of sympathy between the nerves that operate the vital organs has a useful purpose as well. For what will cure weakness in one branch will surely cure weakness in every branch—what will restore one center, will surely restore them all.

There is nothing new about this—nothing any physician would dispute. But it remained for Dr. Shoop to apply this knowledge—to put it to practical use. Dr. Shoop's Restorative is the result of a quarter century of endeavor along this very line. It does not dose the organ or deaden the pain—but it does go at once to the nerve—the inside nerve—the power nerve—and builds it up, and strengthens it and makes it well.

If you have heart trouble and have never tried my remedy, merely write and ask. I will send you an order on your druggist which he will accept as gladly as he would accept a dollar. He will hand you from his shelves a standard size bottle of my prescription, and he will send the bill to me. This offer is made only to strangers to my remedy. Those who have once used the Restorative do not need this evidence. There are no conditions—no requirements. It is open and frank and fair. It is the supreme test of my limitless belief. All that I ask you to do is to write—write to-day.

For a free order for a full dollar bottle you must address Dr. Shoop, Box 52, Racine, Wis. State which book you want.

Mild cases are often cured by a single bottle. For sale at forty thousand drug stores.

Dr. Shoop's Restorative

DISPERSION SALE OF PURE-BRED HORSES, CATTLE and HOGS

The undersigned has received instructions from MRS. AUGUST EICKMEIER, Brodhagen, Ont., to sell by public auction, on Lot 20, Con. 6, Township of Logan, on

WEDNESDAY, MARCH 15, 1905,

the following: 6 Standard-bred and Heavy Draft Horses, Mares, Fillies and Geldings; 14 Pure-bred Shorthorn Cows, Heifers and Bulls, all sired by imported bulls; 2 Pure-bred Yorkshire Boars, 1 do. Sow. Also a quantity of AGRICULTURAL IMPLEMENTS.

SALE AT 12 O'CLOCK.

TERMS: All sums of \$10 and under, cash; over that amount, 8 months' credit will be given on furnishing approved security, 4% for cash on credit amounts. No reserve. Conveyances will be at the Dublin station on arrival of noon train to take out intending purchasers.

AUGUST EICKMEIER, Brodhagen, Ont., Auctioneer for Perth and Huron. o Prop.

Portrait of the Late Bishop Baldwin

1 x 15, on heavy plate paper, suitable for framing, together with memoir, the funeral service and sermon on the occasion; price for the two, 25c.; 5 sets, one address, \$1.00; cash with order. om

The London Printing & Lithographing Co., LONDON, ONTARIO.

GOSSIP

THE SIGNIFICANCE OF SEX CHARACTERISTICS.

By J. McCaig.

Apart from a knowledge of breed characteristics and differences which are valuable and necessary to the breeder of pure-bred stock, there is much to learn from sex characteristics and differences. An animal may be just as badly out of character with respect to sexual properties as with regard to breed properties, and this defect is no less a hindrance to successful breeding.

The practical and important thing to remember, is that there is such a thing as male and female type, and that we should study and observe to get a just appreciation of these. In this view the features that go to make up male expression must not only not be undervalued, but should be sought for and insisted upon. Heavy manes in horses, strong horns in the horned breeds of sheep, heavy crests in bulls, and all such features are in order, and their absence is a defect, as they bespeak appropriate male constitution. If the scientist were to translate such inappropriate lack of male properties into a practical breeding principle, he would say that the lack of organic capacity in such male to develop exuberant features would indicate a want of power in him to produce variation in the offspring; in other words, to STAMP HIS OFFSPRING with special character. This scarcely needs scientific interpretation to the experienced breeder, as he never fails to choose a sire of strong male individuality if he wants to transform his herd or flock.

A female may be similarly out of character as respects sex characteristics. In contrast to the male, she should be marked by a characteristic simplicity and unattractiveness, or perhaps we should say plainness. This difference has strong confirmation in the popularity of a string of exhibition males over a string of females.

This difference has its origin in what may be called natural selection rather than in sexual selection. In a state of nature there is obviously an advantage in the plainness or want of prominence of the pregnant or brooding female, if we extend the discussion to birds. There is another difference which may be referred to the same principle. Besides being more attractive, males are usually stronger and more active than females, which is due to the offices of defence and nourishment devolving on the males. This is no longer a consideration with animals under domestication. It is still the case, however, that the property of QUIETNESS AND PASSIVITY that would be no fault in a female would be out of character in a male. A sluggish stallion or an awkward or ambling bull or ram would not be chosen by an experienced breeder for a sire. Thus it appears that the differences that have arisen between the sexes in their evolution have become permanent, and are important principles in breeding practice.

In noting a few of the qualities that belong to males and females characteristically above, it is not the aim of the writer to give an exhaustive list of these, but to establish a belief in their fundamental utility and importance.

BOOK REVIEW.

Any book reviewed in this department may be ordered through this office.

HACKNEY HORSE STUDBOOK, VOL. XXII.

We have received, by the courtesy of the Secretary of the Hackney Horse Society, Frank F. Euren, 12 Hanover Square, London, W., England, Vol. XXII, of the Hackney Studbook, containing the alphabetical records of the breed for stallions Nos. 8713 to 9076, and mares 16388 to 17074, and re-entries. It is illustrated with cuts of Administrator 8047, champion stallion; Rosadara 11437, champion mare; Sir Horace 5102, champion pony stallion, and Gold Foot 13513, champion pony mare at the Leeds Show, 1904. The volume is neatly printed and should prove very interesting to Hackney breeders.

HORSE OWNERS! USE

CAUSTIC BALSAM.

A safe, speedy and positive cure. The safest, Best BLISTER ever used. Removes all bunches from Horses. Impossible to produce scar or blemish. Send for descriptive circulars.

\$100 REWARD

for any case of colic, curb, splints, contracted or knotted cords, recent shoe boils, splints or callous that cannot be permanently and positively cured, if directions are followed, by

TUTTLE'S ELIXIR.

It relieves and cures Spavins, Ring Bone, Cockle Joints, Soreheads, Grease Heel, Founder, Sore Backs and Shoulders, Bruises, Wire Cuts, Ocular and Saddle Galls, Pneumonia, Distemper, Chafed Places, etc. Used and endorsed by Adams Express Co., Chicago Fire Department and others. Tuttle's American Worm Powders never fail. Tuttle's Family Elixirs stop the pain and aches of mankind instantly. Our 100-page book, "Veterinary Experience" free. Tuttle's Elixir Co., 46 Beverly St., Boston, Mass. Beware of all other Elixirs. Tuttle's is the only genuine. Avoid all blisters, they are only temporary relief. LYMAN, KNOX & SON, AGENTS, Montreal and Toronto, Canada.

THE OXFORD Cream Separator



Is easy to wash and turn, is a perfect skimmer, is durable, has no exposed gears, has low-down supply tank, and is fitted throughout with Ball Bearings.

Those are a few of the features that make the

OXFORD the most up-to-date machine on the market.

WRITE FOR CATALOGUE.

The DURHAM MFG. CO., Ltd., Durham, Ontario.

Dunlop Book FOR HORSEMEN

Free to any address in Canada. 64 pages with charts and drawings. Valuable information about lame horses.

Dunlop Tire Co., Limited, Toronto.

Scotch Shorthorns

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

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

SHORTHORNS FOR SALE. Three bulls about 10 months old, two roans and one red; 5 one-year-old heifers; 6 heifer calves, all sired by Imp. Diamond Jubilee. Also a few choice cows carrying calves or with calves at foot. For prices, apply to

FITZGERALD BROS., Mt. St. Louis P. O., Cleveale Sta., Hillsdale Telegraph Office.

Stallion, by Jubilee Chief, imp. (212) (Hackney), five years old, for sale. Apply to JOHN W. COULTER, St. Thomas.

Large Standard bred STALLION (registered); great stock horse, high hooker. A large Standard brood mare, in foal. Handsome road-ter stallion, with speed (registered). For prices, apply to

DR. R. G. COATES, Thamesville, Ont. RIVER VIEW FARM

ROBERT CLARKE, Importer and Breeder of Chester White Swine. Pigs shipped not akin to each other. For price and particulars, write to 41 COOPER STREET, OTTAWA, ONT.

GOSSIP.

Mr. L. K. Weber, Hawkesville, Waterloo Co., Ont., breeder of Shorthorn cattle, in ordering change of advertisement writes sales have been fairly good, but prices have been favoring buyers, and good for beginners wishing to increase their herds or to improve by introducing new blood.

At the annual sale last week of Berkshires from the herd at Biltmore Farms, Biltmore, N. C., 49 head sold for \$5,172, an average of \$106; highest price, \$400; lowest price, \$30.

Mr. W. H. Arkell, Teeswater, Ont., breeder of Oxford Downs, writes: "Sheep are all doing well, have at present eighteen fine lambs, as good as I ever had, and they are doing finely. 1904 was a good year for us in the sheep business. Sales and prices were good, and we have always found the 'Farmer's Advocate' a good medium for advertising stock."

Vol. 22 of the English Hackney Studbook has been received at this office, through the courtesy of the editor, Mr. Frank F. Euren, 12 Hanover Square, London, W. The volume is handsomely bound, finely printed and illustrated, and contains 469 pages, the pedigrees of stallions numbering from 8713 to 9076, and mares numbering from 16388 to 17074, besides a list of members, transfers, prizewinnings, etc.

Messrs. J. Crouch & Son, of the LaFayette Stock Farm, of LaFayette, Ind., have sold from their branch stables at London, Ont., one of their fine imported German Coach stallions to Fred A. Jennings, of Thedford, Ont. This is a horse that farmers and parties wishing to raise good horses should patronize, and feel proud that they have him in the country, for he is a horse of great style and action. He will prove a great good to the country. If you have not seen him, it will pay you to see him.

Lew W. Cochran, of Crawfordsville, Indiana, advertises in this issue an assortment of fifty Percheron, Shire and Hackney stallions, which he will trade for farm lands or city lots in Western Canada. Mr. Cochran's horses won many good prizes at the World's Fair and International Exhibition, besides a goodly share of the awards at several State fairs. The offer to exchange horses, which are a comparatively scarce article in this country, for land, which is quite plentiful, is a novel idea, and should prove a business getter.

Messrs. H. J. Whitteker & Sons, North Williamsburg, Dundas Co., Ont., breeders of Ayrshire cattle, etc., write: "Please renew our advertisement in your paper, as we cannot get along without advertising in the 'Farmer's Advocate.' Our sales for 1904 were 23 head of Ayrshires and all the Oxford Down sheep and all the Buff Orpington cockerels we had to spare. Our Ayrshires are coming through the winter in good shape, and the bulls we are offering for sale are bred from heavy-milking cows with large teats, and are a good lot. Our Oxford Down ewes are beginning to drop their lambs, and they are a promising lot, bred from our Hobbs ram. Our Buff Orpington hens have been turning out eggs all through the hard winter, and as we purchased two cockerels last fall, the best we could get, to mate with our best hens, we will be prepared to furnish No. 1 eggs this season."

TRADE TOPIC.

A. E. MCKENZIE & CO.—No other country in the world produces such potatoes as Manitoba. The soil is admirably adapted, while the climate and freedom from bugs, blight and rot favor perfect maturity of the very finest tubers. With such ideal conditions, the Province affords unequalled advantages for the development of new varieties and improvement of existing strains. Recognizing this fact, the enterprising seedsmen, A. E. McKenzie & Co., Brandon, Man., are growing potatoes on an extensive scale to supply the demand of eastern planters. Their announcement will be found, this issue, in our advertising columns, and potato-growers are advised to write them for particulars.

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

GOSSIP.

CURED THOROUGHPIN AND IS GOOD FOR ALL BUNCHES.

Thamesford, Ont., Jan. 12th, 1905.
The Lawrence-Williams Co., Cleveland, Ohio:

We have a bottle of GOMBAULT'S CAUSTIC BALSAM. We used it on a mare for thoroughpin and it disappeared entirely. We have a horse with a lump on his breast, and we would like to try the Balsam on it. We have lost the directions for using it. Would you please send us a copy of the directions?
FRANK PETTIT.

Messrs. J. R. McCallum & Sons, Iona Station, Elgin Co., Ont., breeders of Shorthorn cattle, in ordering a change of advertisement, write: "Our herd is coming through the winter in good condition. We have had quite a number of very promising calves born lately, sired by our present stock bull, Wandering Count, by Imp. Wanderer's Last. We have several young bulls fit for service, sired by Royal Duke, son of Imp. Royal Sailor, also cows and heifers bred to Wandering Count."

Mr. Israel Groff, Alma, Ont., breeder of Shorthorns and Berkshires, writes: "Victor's Roan Duke, our stock bull, a worthy son of Golden Drop Victor (imp.), has improved very fast since Toronto Exhibition, and his calves are very promising. I have a number of heifers and cows with calves at foot, which I would sell at reasonable prices. Following is a list of recent sales: To Hugh Semple, Hereward, one bull; to John Clements, of Alma, one bull; to Joseph Underwood, Lakelet, the bull calf, Royal Wenlock, sire Royal Prince (imp.), dam Olive Wenlock 2nd (imp.); to Levi Galbraith, Lakelet, roan heifer calf, sire Victor's Roan Duke, dam Roan Mary; to Malcolm McQueen, Salem, Royal Stamford, sire Royal Hero, dam Rose of Stamford, and to Albert Goetz, the roan bull calf, Crimson Victor, sire Victor's Roan Duke, dam Crimson Flower, by Golden Robe."

"Berkshires have also been in good demand. Have sold two boars and three sows within the last few days."

The herd of Scotch and Scotch-topped Shorthorns, property of T. Douglas & Sons, Strathroy, Ontario, is steadily improving along popular lines. Their herd numbers upwards of 70 head, and is headed by Diamond, a two-year-old roan bull that won first at Toronto in 1903 in the junior yearling class. He has not been fitted since, but has developed into a thick, smooth bull of good type, and his calves are coming good. The red imported cow, Graceful 8th, is well fitted out in all her parts, and is what her name indicates. She also has a fine, large red daughter to her credit, by Imp. Diamond Jubilee, of splendid quality, low and thick, which is now in calf to Diamond. Hillhurst Welcome is a beautiful roan three-year-old, by Imp. Scottish Hero, out of an imported dam, and is just due to calve to Diamond. She is large, and shows great wealth of natural flesh. Vain Blossom is another deep, thick roan that is doing well by her owners. Maple Bank Pansy 2nd is a choice cow that is nursing a nice heifer calf, by Double Gold. The yearling and two-year-old heifers are by Double Gold, the previous stock bull, a son of Imp. Golden Drop Victor. There are several young bulls on hand by Double Gold and Diamond Jubilee, from dams by Young Abbotsburn's Heir, Valkyrie and other noted sires, that are fed with an eye to future usefulness, several of which are good enough to head pure-bred herds, and will be sold very reasonable, if taken soon. Several of the principal families are here represented, upon which choice Scotch sires have been used, until a strong herd of milk and flesh producers has been established.

Among the Clydesdales, besides the brood mares, is to be seen Imp. Royal Viscount, a three-year-old, bred by Mr. Cross, of Argyleshire, a nicely-topped colt, with a splendid quality of bone and good feet; also a bay filly foal, by Royal Viscount, from Maggie of Vanneck, dam by McGregor that appears to be equal to its sire in quality of bone, and promises to develop into a good one. Call and see this stock. It is only about a mile from the town of Strathroy.

Champion Clydesdales BY Clydesdale Champions

FOR THREE SUCCESSIVE YEARS

GRAHAM BROS.

Have won the Clydesdale Stallion Championship at the International, Chicago, and similar honors at Toronto. : : :

1904 Baron Sterling,
Sire Baron's Pride.

1903 Cairnhill,
Sire Ethiopia.

1902 Young McQueen
Sire McQueen.

Also a multitude of other important prizes.

We have select stallions and mares to sell, winners here and in Scotland among them. We can offer more Sons and Daughters of Baron's Pride than any other American firm. Stallions to get pure-breds. Stallions to get grades. Mares for all. Prices are low—any single breeder can afford them. Correspondence solicited. Catalogue on request.

GRAHAM BROS., - - - - - Claremont, Ontario, Canada.

TRUMANS' CHAMPION STUD

READ OUR UNBEATEN RECORD AT ST. LOUIS WORLD'S FAIR:

Premier Championship.
Reserve Grand Championship.
Three Reserve Championships.
Six \$100 Shire Horse Ass'n Gold Medals.
Six Second Premiums.
Three Fourth Premiums.

Grand Championship.
Two Championships.
Five Diplomas.
Nine First Premiums.
Six Third Premiums.
Two Fifth Premiums.

Our fourth carload of Shire, Percheron and Hackney stallions just arrived at our London, Ont., stables, at the Reid Hotel, and with these already on hand make the best collection of stallions to pick from in Canada, many of them being World's Fair and International winners. A responsible guarantee given with every horse. We will sell a better stallion for the money than any other firm. TWENTY-SEVEN YEARS IN THE IMPORTING BUSINESS. Write for full particulars and new Catalogue Q.

Trumans' Pioneer Stud Farm
BUSHNELL, ILL., U.S.A.

Address
H. W. TRUMAN,
Manager, London, Ont., Branch. J. H. TRUMAN,
Whitless, England.

Imported Clyde, Shire and Hackney
STALLIONS.



A few left on hand for sale that I wish to close out at from \$800 to \$1,000 each. These stallions are all bred from the best sires of Scotland and England. Such noted sires as:

King of Fashion (12185), by Baron's Pride (9122).
Prince of Kyle (7155).
Harbling Harold (15649), by Harold (4629).
Gunthorpe Advance (13136), by Bar None (2388).

Write—

J. B. Hogate, Sarnia, Ont., or Lennoxville, Que.

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

QUESTIONS AND ANSWERS.
Miscellaneous.

HOW TO MAKE A "BRANK."

Could you give me a description of how to make what I have heard called a Scotch brank, a kind of halter, some parts of which are made of iron, to teach cattle to lead by halter? R.

Ans.—Can any reader answer this inquiry?

FARMING ON SHARES.

A works farm for B, B doing no work whatever. Writings are drawn to the effect that A is to market and sell the market produce, and divide the cash receipts equally.

1. Can B allow strangers to remove products that are of market value without first consulting A?

2. Or has B any say in the running of the farm, or the marketing of produce? A holds lease for a term of three years. A SUBSCRIBER.

Ans.—1. No. 2. He probably has not as regards the marketing, but in respect of the management of the farm, we would require to see the exact wording of the agreement in order to advise.

MARRIED WOMAN SELLING FARM.

A married woman owns a farm and wishes to sell. She was married, and purchased the farm with her own money a number of years before the Act to facilitate the conveyance of real estate by married women was passed. Could she now, under those circumstances, give a valid title without her husband joining in the conveyance, or does that Act only apply to property acquired after the passing thereof? ENQUIRER.

Ans.—It is very probable that she can, but before definitely contracting to sell, she should submit the title to a solicitor and have him report upon her legal rights respecting the property.

BUSHES AT BOUNDARY.

A's farm joins B's on south and east. B has kept his share of fence in good condition, and brush cut away as much as possible. A has not kept up his share of fence, and has allowed brush and trees to grow to a width of fifteen feet on his side of line, which shades B's fields, and the roots draw the fertility so that B cannot grow more than half a crop for two rods from fence.

1. Can B now compel A to make a lawful fence. (2) and cut down trees and brush so as not to damage his land?

3. How far can he compel him to cut them from the line?

4. Does B have to give A a written notice?

5. How long will A be allowed to have it done? These are both cultivated farms. TIM.

Ans.—1. Yes. 2, 3, 4 and 5. We do not think that B can compel A to cut down or remove the trees, etc., in question.

CLOVER FOR PASTURE.

1. What is the best clover for pasture?

2. What quantity of timothy and clover would you sow per acre?

3. Would you keep a heifer's calf?

4. How long would you keep a calf with its mother?

5. Would you feed roots to a cow when she is in calf?

Ans.—1. A mixture of red clover and alsike answers very well for pasture for a short time; but if permanent pasture is desired, then no clover will compare with lucerne or alfalfa. Care should be taken not to let it get too high before stock is turned on, and not to allow it to be eaten down very close. It should not be pastured at all the first season.

2. A very satisfactory seeding for land in good condition is made up of six pounds timothy seed, five pounds red clover, and one pound alsike per acre.

3. Certainly, if it is a good one. One of the best fat steers we ever had was a heifer's calf.

4. One or two days. It is good for both cow and calf. Some practical and successful stockmen allow the cow to lick the calf, but remove it before she suckles it.

5. Roots are wholesome food for cows in any condition, if not fed in immoderate quantities.

QUESTIONS AND ANSWERS.
Miscellaneous.

FEEDING EGGSHELLS—POULTRY BREEDING
QUERIES.

1. Would you advise feeding eggshells to hens? If so, should they be crushed fine or not?
2. How long after a fowl is mated before the eggs become fertile?
3. How long will eggs remain fertile after the male is removed?
4. Is it inbreeding to allow a male to remain with pullets of the same setting of eggs?

Lincoln Co., Ont.
Ans.—1. Yes, if available. Crush them up, else the hens, by breaking large pieces, may acquire the habit of egg-eating.

2 and 3. It is not definitely known exactly how long it takes for the eggs to become fertilized. A practical rule is to mate the breeding pens up five or six weeks previous to the earliest date of hatching. "On the farm of the Ohio State University, 40 Leghorn hens, which had previously been kept without males, were placed in pens with the male birds February 18th, and the percentage of fertile eggs observed for nine days after mating. This increased from 0, on the day of mating, to 95 per cent., on the eighth day after mating. July 1st, the males were removed from the pens. The fertility of the eggs was apparently not materially affected until the twelfth day after removing the roosters. Unfortunately the eggs were saved only fifteen days, and hence it is not shown how long hens may lay fertile eggs after removal of the male bird." The above, however, is the result of only one experiment, and final conclusions should not be drawn from it. Some authorities allow a shorter time, from four to fourteen days, as the time after mating during which fertility may be depended on.

4. Yes, if the eggs were laid by the same hen, or sired by the same cock.

Veterinary.

TUMORS.

Last June two lumps appeared on my horse's breast—one on each side of the throat, just under the skin. They are as large as large hen's eggs. They are not painful.

Ans.—These are fibrous tumors, and should be carefully dissected out. As they are in such close proximity to large blood vessels the operation must be skillfully performed, and I would advise you to employ a veterinarian.

CONGENITAL MALFORMATION

When calf was born it could not suck, but drank milk out of a pail. It is over two months old and cannot suck yet. Saliva is continually flowing from its mouth, and every time we go to feed it there is one or two wads of straw in its mouth.

Ans.—There is some congenital malformation of the mouth or tongue, or both, and it is not probable anything can be done. It may be it is what is called tongue-tied, and it is possible this might be corrected by an operation. It requires a personal examination to diagnose the trouble, and the possibility of a successful operation.

CONSTIPATION.

Colt was sick in October and again in January. It refused to eat, became restless, would paw, lie down, rise on its fore feet, rub hind quarters against the stall, etc. Is it indigestion, and is it liable to further attacks?

Ans.—This is a form of indigestion. The colt appears to be predisposed to the trouble. All horses are liable to an attack, and those who have congenital weakness of the digestive organs suffer from slight provocation. I would advise you to give him a purgative of six drams aloes and two drams ginger; follow up with a dram each of gentian, ginger and nux vomica, night and morning for two weeks. Feed regularly on moderate quantities of food of first-class quality, and do not make any sudden changes in his food. If he is attacked again, give injections of soapy warm water per rectum, and give one ounce chloral hydrate dissolved in a pint of warm water every hour until relieved. Follow this with a purgative and treatment as above.

A WARNING NOTE
FROM THE BACK.

People often say, "How are we to know when the kidneys are out of order?" The location of the kidneys, close to the small of the back, renders the detection of kidney trouble a simple matter. The note of warning comes from the back, in the shape of backache. Don't neglect to cure it immediately. Serious kidney trouble will follow if you do. A few doses of

DOAN'S KIDNEY PILLS,

taken in time, often save years of suffering. Mr. Horatio Till, Geary, N.B., writes:—"I suffered for about two years with kidney disease. Had pains in my back, hips and legs; could not sleep well, and had no appetite. I took one box of Doan's Kidney Pills, and they cured me. The pains have all left, and I now sleep well."

Price 50 cents per box, or 8 for \$1.25. All dealers, or

THE DOAN KIDNEY PILL CO.,
Toronto, Ont.

"THE REPOSITORY"

Burns & Sheppard, Proprietors,



Cor. Simcoe and Nelson Sts., TORONTO.

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

Special Sales of Thoroughbred Stock conducted. Consignments solicited. Correspondence will receive prompt attention.

This is the best market in Canada for either buyer or seller. Nearly two hundred horses sold each week.

BREEDING CLYDESDALES

I have recently filled my stables with just the class of imported

Clydesdale Stallions

that will do the horse-breeders of this country most good. They are a grand lot to select from, and I can give the best possible terms to intending buyers. Be logical, and secure a horse of the approved breed. It is a privilege to show my stock and attend to enquiries by letter. Call or write.

T. H. HASSARD, MILLBROOK, ONT.

Clydesdale Stallions
and Fillies.

Imported and Canadian-bred. For sale: Two Canadian-bred stallions, rising 3 years, from imp. sire and dams. Also SHORTHORN Cows and Heifers for sale. Reasonable prices. For particulars write to

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

2 Registered
Clydesdale Stallions
FOR SALE.

For price and particulars write to
R. & C. PALING,
Caledonia Stn. & Tel., North Seneca

DEATH TO HEAVES
Guaranteed
NEWTON'S Heave, Cough, Dis-temper and Indigestion Cure. A veterinary specific for wind, throat and stomach troubles. Strongly recommended. \$1.00 per can, mail or express paid. Newton Kennedy Co., Toledo, Ohio. Your druggist has it or can be had in trade any wholesale druggist.

FOR SALE:
SALOMON, the celebrated imported
GERMAN COACH STALLION

which can be seen at Mr. John McRoberts' Township of Caradoc, Lot 5, Con. 2, County of Middlesex, and information regarding the above can be had by writing either John McRoberts, Melbourne P.O., or W. W. Gordon, Glenora. GORDON, McROBERTS & McLELLAN, Props.

Veterinary.

WORMS.

Six-months-old colt is not doing well. He eats well and feels well, but will not gain in flesh.

Ans.—It is probable he has worms. Take four drams each sulphate of iron, sulphate of copper, tartar emetic and calomel; mix, and make into twelve powders. Give him a powder every night and morning. After the last has been taken, give him a purgative of half a pint raw linseed oil. Feed bran only for twenty-four hours after giving purgative.

AGALACTIA.

Mare that has bred several times, and always was a good milker, produced a foal on February 14th, but she had no milk. She was well fed and in good condition. I gave her bran and chopped oats, warm, with a tablespoonful of saltpetre, and warm water to drink. Would you advise me to breed her again? Would you advise me to breed her three-year-old daughter, weighing 1,200 lbs. to a Clydesdale stallion weighing 1,800?

Ans.—Agalactia, or absence of milk, occasionally occurs in mares without appreciable cause, and nothing can be done for the condition, other than feeding on milk-producing food. You fed her all right, but should not have given the saltpetre. This drug had a tendency to prevent milk secretion, but I do not think it made much difference in this case. I would breed her again so that she would foal while on grass. The sire mentioned should mate well with the filly, but I would prefer one not quite so large.

LOCKJAW.

Calf was castrated January 14th. On the 25th, its appetite failed; in a few days it bloated, became stiff in every joint and muscle. Its neck became very stiff, and if the animal was turned on its back, the head and neck would support the shoulders clear of the ground. In four or five days we killed it. An examination of the scrotum revealed some puss.

1. Was it lockjaw?
2. Would cold cause it after castration?
3. Would indigestion cause it?
4. Is there any cure?

Ans.—1. It was lockjaw.
2. No. The disease is caused by a germ that exists in the earth or stables and gains entrance through a wound or sore. Any operation may be followed by the disease, and it often follows pricks in the foot, sore shoulders, scratches, or any sore. No blame can be attached to the operator when tetanus (lockjaw) follows an operation. The only blame in this case is your own for allowing the wounds to close too quickly. They should have been kept open to allow the puss to escape, but this neglect is not responsible for the disease.
3. No.
4. In rare cases recovery takes place.

ENLARGED KNEE

1. Heavy mare started off slightly lame, but went all right in a few minutes. She was given a long drive in deep snow with crust. Next day her knee was badly swollen. I applied liniment, and reduced the swelling, with the exception of a bunch on front knee. I drove her again in about three weeks, and now her knee is badly swollen, and she is very lame.

2. How can a team be prevented from crowding in deep snow?

Ans.—I am of the opinion she bruised her knee in some way, and a serious abscess has formed. If fluid is present, it must be removed, either by lancing or using an instrument called an aspirator. As the knee is a critical part to operate on, you had better employ a veterinarian. If you decide to treat yourself, give rest, bathe long and often with hot water, and apply camphorated liniment (which you can get at any drug store) after bathing. When the inflammation is allayed, rub well once daily, to reduce the bunch, with the following liniment: four drams each of resublimed iodine crystals and iodide of potassium, and four ounces each of glycerine and alcohol. It will require patience and attention.

2. There is no known means of curing a team of crowding in deep snow, when once the habit has been acquired.

Children
Are Underfed

THE RESULT IS WEAKNESS, RICKETS, ST. VITUS' DANCE AND MANY ILLS OF CHILDHOOD
—THE CURE IS

Dr. Chase's
Nerve Food

"Nine-tenths of children are underfed," writes a great English scientist who made an exhaustive study of the subject.

Children require double nourishment—to enable them to grow as well as to repair the wear and tear consequent on living.

Active exercise of mind and body, together with growth and physiological changes, consume nerve force at a tremendous rate, exhaust the supply of rich blood and leave the body weak and liable to disease.

Pallor and weakness, weak eyes, nervousness, skin diseases, rickets, St. Vitus' dance and constant liability to catch cold and to contract the disease of childhood are the result.

As a means of restoring the vitality of weak, puny children there is no preparation so effective as Dr. Chase's Nerve Food.

Being mild and gentle in action and powerful as a creator of new, rich blood and nerve force, this great food cure is admirably suited to the needs of childhood, soon adds new, firm flesh and tissue to the weak and emaciated body and restores the vigor of robust childhood.

There is no means by which nourishment is so directly supplied to the blood and nerves as by the use of Dr. Chase's Nerve Food, because this preparation is composed entirely of the elements of nature which are required to build up and restore strength to the system.

Dr. Chase's Nerve Food, 50 cents a box, at all dealers, or Edmanson, Bates & Co., Toronto. The portrait and signature of Dr. A. W. Chase, the famous recipe-book author, are on every box.

30 FULL-BLOOD PERCHERONS

Consisting of stallions and mares, from one year old up, both home-bred and imported. The foundation stock is principally Brilliant blood, a son of the noted Besique, at the head of our stud at present. We have them

with size and quality, clean legs and feet like iron. We are prepared to give better quality for less money than can be obtained elsewhere in America. If you need a horse in your locality, we will assist you to form a company. Terms easy. Stock fully guaranteed. Located three miles out of town, or two miles from Ruthven, on the Pore Marquette. We pay livery if not on hand to meet you. Address:

I. A. & E. J. WIGLE,
Essex County, Kingsville, Ontario.

Burdennet Stock Farm—Clydesdales of the most fashionable strains, Imp. and Canadian-bred mares for sale reasonable. Also Berkshire pigs. For particulars write to
A. S. GORMLEY, Unionville Stn. and P.O.

THE SUNNYSIDE HERFORDS

Imp. Onward at head of herd. Special offering: 4 bulls over 1 year old, 6 choice bull calves, 20 choice cows and heifers of the choicest breeding and individual merit. The above are show cattle and prizewinners, and we will quote prices on them that you can buy at. Address O'NEIL BROS., Mouthgate, Ilderton Stn., L.H.E.; Lucan Stn., G.T.R.

HURON CENTRAL STOCK FARM

OF
ABERDEEN-ANGUS
Our present offering is seven young bulls, 8 to 18 months old. All sired by the champion bull Goderich Chief 3743. All stock registered in the American Herdbook. Also offering the young coach stallion Godolier, winner of 1st at London this year.
E. BUTT & SONS, Clinton, Ont.

Asthma
Cured to Stay Cured.

Attacks stopped permanently. Cause removed. Breathing organs and nervous system restored. Symptoms never return. No medicines needed afterwards. 21 years of success treating Asthma and Hay Fever. 58,000 patients. Book 57F Free. Very interesting. Write P. HAROLD HAYES, Buffalo, N.Y.

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

QUESTIONS AND ANSWERS. Veterinary.

BREEDING MARE WITH RINGBONE.

Twelve-year-old mare developed a ringbone about a year ago. Do you think it would be safe to breed her?

L. B. B.

Ans.—Either mares or stallions with ringbones, or kindred bone diseases, are very liable to produce foals with a congenital predisposition to the same diseases. Of course, all foals produced by diseased parents do not become diseased, but a large percentage does, hence the practice of breeding from such is generally condemned.

AZOTURIA, ETC.

Mare stood in the stable, and was fed on hay and oats for two weeks. I hitched her, and after driving two miles she became stiff; I drove her two miles further and she was better. I let her stand in a stable for two hours and then drove her home. What can I do to prevent a further attack, and how should I treat her if she has one?

2. One of my fat cattle occasionally loses his appetite and takes diarrhoea. When I cease feeding turnips, chopped oats and barley the diarrhoea ceases.

3. Skin in front of mare's hock is cracked and it exudes a yellowish fluid.

J. H.

Ans.—This was an attack of a disease called azoturia, due to standing idle and being well fed, and then given exercise. It is exceptional for an animal to get better when exercise is continued after symptoms of the disease appears. Prevention consists in giving regular exercise. Treatment consists in unitching at the first symptoms, getting her into the nearest stable, giving a purgative, applying mustard over the loins, and blanketing warmly. Give two drams iodide of potassium every four hours for four or five doses, and allow her to stand idle for about three days. If she falls down and cannot rise, send at once for your veterinarian, as it will require treatment according to complications.

2. I think the diarrhoea is due to the turnips, and the loss of appetite to the diarrhoea. Some cattle cannot eat turnips with impunity. Cease feeding turnips, and it is probable that you will have no trouble.

3. This is sallanders, and is very hard to cure. Dress the wound once daily with butter of antimony applied with a feather, for four applications. Then dress three times daily with oxide of zinc ointment. Allow her to stand as quiet as possible.

SALLANDERS, ETC.

1. Mare had hind leg injured in front of hock. It did not heal, but began to discharge a fetid matter, and proud flesh formed. She has also capped hock.

2. Heavy mare has very hairy legs. They are very itchy and sore, and one broke out in front of hock.

3. Cow has a large lump on her throat just beneath the skin.

H. E. H.

Ans.—1. This is called sallanders, and, on account of the motion of the joint, is very hard to cure. Keep her as quiet as possible. Apply butter of antimony with a feather once daily until all proud flesh disappears, then apply oxide of zinc ointment three times daily. The capped hock is also hard to reduce. If there is serum present it must be lanced. If no fluid is present rub well once daily with a liniment composed of four drams each resublimed iodine crystals and iodide of potassium, and four ounces each of glycerine and alcohol.

2. Treat hock the same as No. 1. Purge with nine drams aloes and two drams ginger. Follow up with one and one-half ounces Fowler's solution of arsenic twice daily every alternate week. Dress the itchy legs twice daily with corrosive sublimate, 20 grains to a quart of water. The hair must be parted and the liquid applied to the skin, and draughts and cold excluded until the legs become dry. Horses with coarse hair and beefy legs are particularly predisposed to this condition, and it is very hard to combat.

3. This may be actinomycosis (lump jaw), or a fibrous tumor. As it has no bony connection it should be carefully dissected out, the skin stitched up, with the exception of an opening at the lowest part for the escape of pus, and the cavity flushed out three times daily with a five-per-cent. solution of carbolic acid.

V.

DR. SCOTT'S STOCK COMPOUND

Finds favor with the largest exporters and importers and undoubtedly the best judges in Canada.

READ THIS:

There is no Stock Food or Blood Purifier on the market to-day that gives the universal satisfaction and does all that its proprietor claims for it as Dr. Scott's Dietetic Stock Compound. Knowing the ingredients that it is composed of, I strongly advised the Dalgetty Bros., the largest importers and exporters in Canada, to give Dr. Scott's Compound a trial with their horses on board ship, and to our utmost delight the consignments have landed with their legs in natural condition, free from the swelling and staking that we were continually troubled with, their coats and skin in glossy condition, appetite good, and, in fact, the horses were in shape to show to customers and sell right off the boat, and continued to thrive and gain flesh.

Dietetic Stock Compound strengthens the digestive organs and acts mildly on the excretory organs; in fact, tones up the whole system, enabling the animal to get full benefit of all the nourishment contained in the food.

Since using this compound our stables at home and abroad have never been without it.

For debilitated and unthrifty animals we consider it has no equal as a flesh and health producer, and cheerfully recommend its use. Signed,

E. A. BLACKWELL,

Veterinary Surgeon for Dalgetty Bros., London, Ont.; Dundee, Scotland. Put up in 25-lb. Pails at \$2.50, 9-lb. Packages for \$1.00, and 4-lb. Packages at 50c

MANUFACTURED BY DR. SCOTT & CO., LONDON, ONT.

IT IS ALIVE!

As used in the Royal Stables.



No Ephemeral. * Directions with every Box.

Stevens' Ointment

as used in the Royal Stables, is alive with energy in curing Spavin, Ringbone, Curb, etc., and all enlargements in Horses and Cattle. Go by the Book.

EVANS & SONS, LTD., Montreal, Que., Agents for Canada.

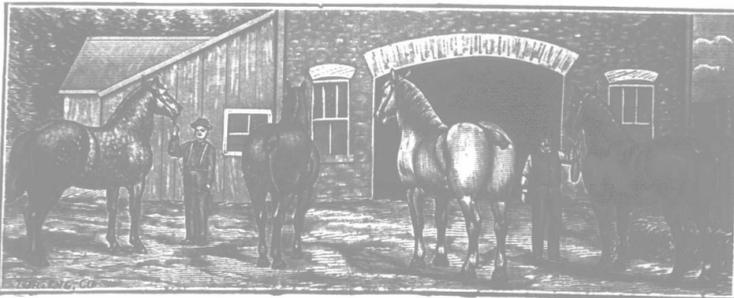
Smith & Richardson's CLYDESDALES

COLUMBUS, - ONTARIO.

We are now offering for sale the finest lot we ever imported at reasonable prices. Amongst them, Baron Gartley, winner of 1st prize and sweepstakes.

Stations—Oshawa and Brooklin, G. T. R. Myrtle, C. P. R.

Long-distance Telephone at Residence.



20 PERCHERONS—20

Have just arrived with our new importation, Jan. 31st, 1905, direct from France, of 20 high-class Percherons and prizewinners in France, from the best breeders in France. They are descendants of such noted champions as Brilliant, Besique, Romulus. Have personally selected every horse ourselves, using extraordinary caution to select nothing but good, sound, serviceable horses that will do our customers and the country good. Colors, black and dark dapple grays. They are large and blocky fellows, 3 to 5 years old, and can go like trotters, weighing 1600 lbs. to 2000 lbs., with the right kind of feet and legs. We have a few choice German Coachers and Hackneys that are also for sale. We will sell you a better stallion for less money than any other importers in America, with a guarantee as good as gold. Intending purchasers should visit our stables before buying elsewhere. Inspect our stock and get our prices. Terms made to suit purchasers.

HAMILTON & HAWTHORNE, - SIMCOE, ONTARIO. 82 miles south-west of Toronto, on G. T. R.

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

Veterinary.

WIND-PUFFS ON HORSE.

What treatment would you recommend for removing wind-puffs from a horse?

Ans.—Bathe with ice-cold water for half an hour every morning; rub dry after bathing, and apply an iodine liniment, consisting of 1 dram of iodine crystals to 16 ozs. of water. If the horse is not lame, I would recommend leaving him alone.

TAPEWORM IN HORSE.

What is the proper method of removing a tapeworm from a horse?

Ans.—Give 2 ozs. of pumpkin seed every day for a week, after which give a ball. I would recommend pulverizing the pumpkin seed, by putting through a meat-mill or coffee-mill, or anything of the sort, if you have it convenient. The seed may be given in oat chop.

INFLAMMATION OF STOMACH.

I had a valuable heifer die very suddenly. She ate breakfast, and was dead in an hour. She had been in perfect health. I examined her after death, but found nothing wrong, except on opening the stomach half of the surface had a reddish color, and was inflamed. Please let me know what you think was the cause of death.

Ans.—I think your heifer died of inflammation of the stomach. It is rather hard to say what was the cause, but in any case I consider it most unlikely that any more would go in the same way.

WARTS.

I have a Holstein bull; he has warts on his neck and head, and has one large bunch of warts on his shoulder. What causes warts? How may they be removed? Do they hurt him for showing purposes?

F. H. M.

Ans.—Warts are caused by an irritation in the skin. Sometimes rubbing against the manger might cause them; sometimes an impoverished condition of the skin. Have them cut off, either with a shears or knife, and apply some butter of antimony with a feather. I think it would come against him for showing purposes.

BURSAL ENLARGEMENT.

Horse raised hard windpuff on hind leg. He is quite lame.

M. S.

Ans.—Give rest. Clip the hair off, and get the following blister, viz., one and a half drams each biniodide of mercury and cantharides, mixed with two ounces vaseline. Rub the blister well in. Tie so that he cannot bite the part. In twenty-four hours rub well again, and in twenty-four hours longer wash off and apply sweet oil. Let his head down now, and oil every day. When the scale comes off, if he is still lame repeat the blister. The lameness should disappear, but it is doubtful if the puff will.

LUMP JAW.

Have a cow that has a lump on her jaw. We have been giving her iodide of potassium for three weeks, gradually increasing dose till she was getting 1 oz. three times daily. The hair on her neck is always wet. Should we continue giving iodide of potassium?

D. M.

Ans.—Your cow is suffering from actinomycosis, or lump-jaw. If the bone is affected, iodide of potassium will not remove the lump; indeed nothing will. Better destroy the animal; but if the lump is only in the soft tissues, it can be removed by a veterinary surgeon.

SORES ON HEIFER'S LEGS.

I have a heifer with sores on her legs, about the size of a one-cent piece; covered with heavy scab. Please state cause and cure.

S. F. R.

Ans.—I think the sores are caused by insufficient bedding. The animal lies on the hard floor, or if the heifer has been well bedded, it might come from an impoverished condition of blood. The treatment is as follows: 1 1/4 lbs. sulphate of magnesia. After the dose has operated, get 3 ozs. hyposulphite of soda; divide into twelve powders, and give a powder night and morning. Keep lard or oil on the scabs to keep them soft, and wherever a scab has been removed, apply a carbolic solution, one ounce of carbolic acid to 24 of water.

GOSSIP.

Messrs. J. Watt & Son, Salem, Ont., write: "We have recently sold the following Shorthorns: To Mr. Meyers, Brodhagen, Ont., a very good bull, out of an imported Merry Maid heifer, and by imported Bapton Chancellor; to Mr. Coutts, Egerton, Ont., a nice, straight, short-legged, blocky calf, one that is sure to make a good breeder. We have still on hand a very fine imported bull, a grandson of Golden Fame, and out of a Miss Ramsden dam. Nearly all our cows have calved this season to imported Royal Archer, a Bessie, and bred by Wm. Anderson, Kintore, Aberdeenshire, and Royal Star, a Strathallan. As we are crowded for room, we will sell a number of females very reasonable. We have still a few nice Berkshires on hand."

Mr. H. K. Fairbairn, Thedford, Ont., writes: "The red and roan Shorthorn bulls we are offering at the Provincial auction sale, at Guelph, on March 22nd, are grand individuals. Their dams are mentioned in the 'Farmer's Advocate' of February 23rd, page 286. The red is by Royal Prince, dam Myrtle, grandsire Indian Chief (imp.). The roan is out of Juliet, the dairy-test winner. He is a grand feeder and handler; girths six feet and not a year old yet. A mate to him, and we think his rival, the same color, and may be a better bull, two days younger, is also for sale. Parties attending the Guelph sale should make it a point to see these cattle. We are also offering a four-year-old cow, dam of the last named calf, due to calve March 27th. These cattle are all sired by the grand stock bull, Royal Prince = 31241 =."

Mr. J. A. Govenlock, Forest, Ont., writes: "Any person having any intention of purchasing a good young Hereford bull or female will do well to attend the Provincial sale, at Guelph, on March 22nd, of pure-bred cattle, as we are offering our prizewinning bull, Forst Pride, that captured first prize at Toronto, London and six other leading fairs in Canada during this past fall, against lots of opposition, winning sweepstakes as the best bull any age or breed at Sarnia. This will be a rare chance to get a proper good bull to head a herd. Mr. Govenlock is also offering two very handsome heifers, two years old, one bred to this noted bull, and the other to his herd bull, Imperial. Imperial has also won a wide reputation as a prizewinner at eight different fairs, sweeping everything in his class as a yearling bull. This is the kind of stock kept at Forest View Farm."

The Compton Place herd of Berkshire pigs, claiming the preface "Polagate," the property of her Grace the Duchess of Devonshire, Eastbourne, Sussex, England, advertised in this paper, was started in 1903, by purchasing all the best in the Compton Valence herd, a name well known to old-established Canadian breeders, and from which have been produced such champions as Tinker, Warwick, Honeymoon, Highclere, Eclipse, Royal Star, Her Majesty, and many others. The "Sallie" and "Ruby" strains have also a place in the herd. From the outset, size, purity and constitutional vigor have been the chief points aimed at, and with success: specimens having withstood twelve consecutive weeks' showing under canvas in the ever-changing English climate, and the journey across the Atlantic, meanwhile producing litters, and still being in the condition to win against Canada's best. Showing in 1903 resulted in the winning of 73 awards, being more than the combined winnings of any other two herds. The champion cup against all breeds of either sex was won with "Polagate Daily Bread," and the champion cup for the best sow against all breeds with "Polagate Delightful Lady." In 1904 the winnings total up to 102 awards, again being more than the combined winnings of any two herds; the challenge cup, champion cup, and champion plate being won in the carcass competition against all breeds at the Smithfield (London) Fat-stock Show. Specimens have recently been exported to Germany, New Zealand, and Canada, and enquiries are at present on hand from Victoria, Melbourne, United States, and Canada, whilst many have been sold to various parts of England. See the advertisement in the Farmer's Advocate.

Lump Jaw
Save the animal—save your herd—cure every case of Lump Jaw. The disease is fatal in time, and it spreads. Only one way to cure it—use **Fleming's Lump Jaw Cure**. No trouble—rub it on. No risk—your money back if it ever fails. Used for seven years by nearly all the big stockmen. Free illustrated book on Lump Jaw and other diseases and bleedings of cattle and horses. Write for it today.
FLEMING BROS., Chemists,
45 Front Street, West, Toronto, Can.

TWO CHOICE IMPORTED BULLS FOR SALE.


Spicy Broad hooks, sired by Spicy King (76717), Scottish Hero, Rosemary, by Proud Champion (81984). Also a few promising home-bred bulls, sired by Bapton Chancellor, and a number of imported and Canadian-bred females at moderate prices.
H. J. DAVIS, Woodstock, Ont.

SPECIAL OFFERING OF SHORTHORNS and SHROPSHIRE

(Imp.) Scotland's Pride = 36098 =, 5 years old, a Cruickshank Clipper, by the great sire, Star of Morning.
(Imp.) Scottish Pride = 36106 =, 4 years old, a grand sire, of the Marr Roan Lady family.
2 bulls, 2 years old, and 7 from 9 to 15 months.
20 imported and home-bred cows and heifers.
All of the most approved Scotch breeding.
30 Shropshire ewes, one and two years old.
25 ram lambs.
No reasonable offer refused. For catalogue or further particulars write
W. G. PETTIT & SONS,
FREEMAN, ONT. o
Burlington Jct. Station, Telegraph, Telephone

SCOTCH SHORTHORNS

85 head to select from.
Present offering includes our herd bull, Imp. Greengill Victor, a Princess Royal, bred by W. S. Marr. He is a grand individual and an extra sire, and 13 bulls his get, from 6 to 15 months, 7 of them from imported sire and dam of such Cruickshank families as Victoria, Orange Blossom, Augusta, Mysie, Jilt, Claret and Missie. Also 40 cows and heifers, all of noted Scotch breeding, with calf at foot or bred to herd bull.
R. MITCHELL & SONS,
Nelson P. O., Ont.; Burlington Junction Sta.

FLETCHER SHORTHORNS

Our herd of breeding cows, both imported and home-bred, are of the most fashionable Scotch families. Among the really good sires which have been used are Spicy Robin 28259, winner of 3rd prize at Dominion Exhibition, Toronto, and Joy of Morning (imp.) 32070, winning 1st prize at same exhibition, 1904. Stock of either sires for sale. **GEORGE D. FLETCHER, Binkham P. O., Ont. Erin Shipping Station, O. P. E.**

THREE IMPORTED Shorthorn Bulls

Four imported cows in calf, home-bred cows, heifers and young bulls, all of straight Scotch families. Four imported Shropshire rams, eight imported ewes and any number of Shropshire and Cotswold ram and ewe lambs of the highest class, is what I can show you now, and all will be priced at mod. rate prices.
Robert Miller, Stouffville, Ont.
Representative in America of Alfred Mansell & Co., Shrewsbury, England.

Shorthorns and Lincolns

12 young bulls, 6 heifers, and some young cows of choice breeding. Prices very reasonable.
W. H. TAYLOR & SON, Parkhill, Ont.

Shorthorns, Lincolns and Berkshires

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

IT MAKES COWS BREED.

BOOK FREE.
MOORE BROS.,
Veterinary Surgeons,
ALBANY, NEW YORK

Scotch Shorthorns 4 bulls, 20 months old; 2 bulls, 10 months old; also several cows and heifers in calf, and young heifers. At let-live prices. **L. K. WEBER,** Waterloo Co. o Hawkesville, Ont.

QUESTIONS AND ANSWERS. Miscellaneous.

COW BUYING.

1. A has a credit auction sale in December, 1904, and has a card attached to each cow's stall, containing the number, age and time of calving? B buys a cow that was due to calve on January 14th. The cow at present has not any appearance of coming in before the first of April. Can A collect the full amount of B's note, B having bought this cow for a winter dairy? **W. J.**

Ans.—We think so. At the same time it is possible that B may be entitled to damages at A's hands for misrepresentation or breach of warranty, but the statement of facts submitted does not disclose a case sufficient in point of law to warrant legal proceedings.

FROSTPROOF CEMENT WALL.

Would you kindly inform me, through the columns of the "Farmer's Advocate," whether or not a cement concrete cellar wall, twelve inches thick, would be frostproof? **W. N. M.**

Ans.—That would depend upon the severity of the frost, the length of its continuance, and to some extent the wind. Frost will penetrate either stone or concrete walls one foot thick, or possibly two feet thick. To make this wall proof under very severe conditions, better stud it up, and thin board closely, leaving a dead-air space.

TREATISE ON MEDICINAL HERBS.

Will you please give me information as to where I can get a book giving a description of all medicinal herbs, plants and roots—the time for gathering and method of curing properly; also price of the book? **A. F. M.**

Ans.—We do not know any work of the kind described, but a very good household medical book is "The Practical Encyclopedia of Medicine," which contains descriptions of the properties and uses of a considerable number of common medicinal plants, illustrated with colored plates. It may be obtained through this office, for \$4.75, morocco binding; cheaper binding, \$4.

SUDDEN DEATH LICE AND RINGWORM.

1. Four-year-old horse dropped dead while working at light work. He was never sick in his life. Was playing in the yard two or three hours before it. What was the cause of his death?

2. What is the best cure for lice on cattle?

The best cure we have found for ringworm is castor oil and sulphur.

OLD SUBSCRIBER.

Ans.—1. Probably heart failure. A post-mortem examination would be necessary to tell.
2. See previous issues.

SHEEP IN ORCHARD—SPRAYING NOZZLES.

1. Will sheep or lambs bark apple trees ten years old, when there is rape for them to eat in the orchard?

2. What is the best kind of nozzle made for spraying, and where can it be got?

R. F.

Ans.—1. In winter or spring they certainly will, and we have seen them bark the trees in summer also. Better keep your eye on them, even with the rape there, or you may lose your trees.

2. Consult our advertisers of spraying outfits, any of whom have good apparatus.

GREEN-CUT BONE—WHEN TO KILL PIGS FOR SUMMER PORK BARN FOUNDATION.

1. Where can green-cut bone be got?

2. When is the best time for a farmer to kill pork for summer meat?

3. In building a barn, is it a good plan to put foundations in a deep bank?

D. V.

Ans.—1. Bone meal may be purchased from dealers in poultry supplies. In many sections local dealers keep it in stock. Green-cut bone may be prepared by procuring fresh bones from kitchen or butcher shop, and grinding with one of the numerous bone cutters designed for the purpose, and costing, according to capacity, from about \$8.50 to \$12.

2. Almost any time after the middle of November.

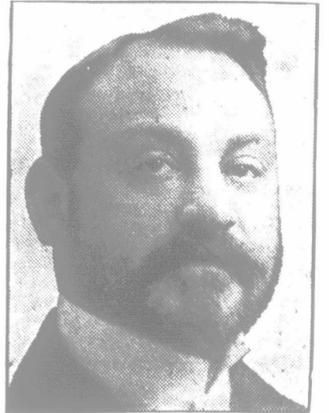
3. No, basements built into the side of a bank are dark and damp. Three or four feet on one side is not a serious objection, however, and, in certain sites, saves considerable labor in preparing the approach. It is understood, of course, that the foundation should be laid deep enough to prevent danger from frost.

MAKES MEN SOUND AND STRONG

Detroit Specialist Making Men's Diseases a Specialty for Years, Will Accept Your Case, Giving It Individual Treatment. You may Use It in the Privacy of Your Own Home.

You May Pay When You are Cured.

A Detroit Specialist who has 14 diplomas and certificates from medical colleges and state boards of medical examiners, and who has a vast experience in doctoring diseases of men, is positive he can cure a great many so called incurable cases;



DR. S. GOLDBERG.

The possessor of 14 diplomas and certificates, who wants no money that he does not earn.

In order to convince patients that he has the ability to do as he says, Dr. Goldberg will accept your case for treatment, and you need not pay one penny until a complete cure has been made; he wants to hear from patients who have been unable to get cured, as he guarantees a positive cure for all chronic, nervous, blood and skin diseases, which he accepts for treatment. He not only cures the condition itself, but likewise all the complications, such as rheumatism, bladder or kidney troubles, blood poison, physical and nervous debility, lack of vitality, stomach trouble, etc.

The doctor realizes that it is one thing to make claims and another thing to back them up; so he has made it a rule not to ask for money unless he cures you, and when you are cured, he feels sure that you will willingly pay him a small fee. It seems, therefore, that it is to the best interests of everyone who suffers to write the doctor confidentially and lay your case before him, which will receive careful attention, and a correct diagnosis of your case will be made free of charge; if you have lost faith write him, as you have everything to gain and nothing to lose; you must remember not one penny need be paid until you are cured. All medicines for patients are prepared in his own laboratory to meet the requirements of each individual case. He will send a booklet on the subject, which contains the 14 diplomas and certificates, entirely free. Address him simply Dr. S. Goldberg, 208 Woodward Ave., Room 135 Detroit, Michigan. Medicines for Canadian patients sent from Windsor, Ont., consequently there is no duty to be paid.

Scotch Shorthorns

YOUNG BULLS AND HEIFERS

by imp. Royal Prince 71490 and imp. Blue Ribbon 17095 for sale at very reasonable prices. Come and see what I have.

DAVID BIRKELL, Maple Hall Stock Farm, Greenwood Ont.

Pickering Sta., G. T. R. Clarendon, C. P. R.

SHORTHORNS & CLYDESDALES

Present offerings, a few young bulls, sired by Prince of Banff (Imp.), also one registered Clydesdale stallion, rising 2 years. Prices low, considering quality.

DAVID HULL, Staffs, Ont.

YOUNG SHORTHORNS

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

SOLOMON SHANTZ, Hayville P. O., Plum Grove Stock Farm, Baden Sta.

SHORTHORNS

Choice young bulls for sale, ready for service.

For particulars write to **JOHN ELDER, Hensall Stn. & P. O., Ont.**

MOUNTAIN VIEW SHORTHORNS

Imported and home-bred, male and female, prize and sweepstakes winners, various ages. Anything for sale.

S. J. McKNIGHT, Epping P. O., Thornbury Station.

WILLOW BANK STOCK FARM—1855

Old Established Herd.

Special offering of **SHORTHORNS**, either sex; also choice **BERKSHIRE PIGS**, fit for service. **JAMES DOUGLAS, Caledonia, Ont.**

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

QUESTIONS AND ANSWERS. Miscellaneous.

SCHOOL TRUSTEE RESIGNING.

Can a trustee who was legally appointed at the annual meeting in January, 1905, resign, who claims that they are not doing business under the School Act, and that he cannot work with the other two trustees? W. H. W.

Ans.—Yes; by giving notice in writing of such resignation to each of his colleagues in office.

COMPULSORY CUTTING OF WEEDS.

Can the council pass a by-law to compel the farmers to cut their own weeds around their own farms along the road? Or should the Government pass that by-law? H. A.

Ans.—Under the Consolidated Municipal Act, 1903, the council may pass by-laws for preventing the growth of Canada thistles and other weeds detrimental to husbandry, and for compelling the destruction thereof. But the Revised Statute of Ontario, 1897, chapter 279, contains very comprehensive provisions for the destruction, by owners and occupants, of weeds growing on their lands, and by overseers as to weeds growing on highways and road allowances.

SHIFTING LINE FENCE.

1. A and B buy farms side by side. Of course there is a line fence between them. It was there before they bought. B has moved his part at the one end on A several feet. Can A make B move it back? How would A go about it? Could A move it back without saying anything to B?

2. A and B were driving on the road. A had a buggy and a man in with him. B had a heavy wagon. A went to turn, but never stopped his horse. B was going straight on. B's wagon caught A's buggy and upset it; threw the two men out, and broke the buggy. Could A make B pay damages, and how would he proceed? SUBSCRIBER.

Ans.—1. If really in upon A's land as stated, he could himself move it back to the boundary line; but he ought first to make sure that it is so improperly on his land and then request B to attend to its removal, and only do it himself in the event of B's refusal or neglect.

2. It does not appear from your statement that the case amounts to more than one of mere accident, and we do not see that B is legally liable.

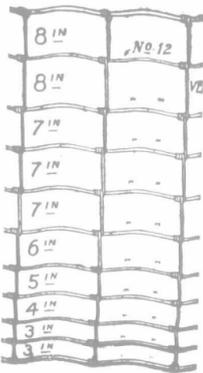
AN UNRELIABLE TANNER.

About the 23rd of November last I sent an unusually fine sheepskin to a tanner fourteen miles distant to be tanned and colored. He agreed to have it done in two weeks. At the end of that time I went and paid him \$1, but it was not done. He promised to do it and leave it on the 21st of December within five miles of my house. He did not do so. On New Year's Day he drove past and told my nephew to tell me that it was done, but he had forgotten to bring it. I then drove for it again, and he said it was not finished, being still not colored. The second time I went I decided to take it home uncolored. He then offered me a very inferior one to my own, which I refused to take, but offered to settle the matter for two dollars. He would not do so. About a week after, he wrote me saying that another man claimed the skin he offered me, but that he had one he would send me. I answered that I would consider the matter ended if he sent me mine, or one that I thought equally as good, and if he could not I would accept three dollars in settlement. He then wrote me a very insulting letter, in which he offered me back the dollar I gave him and 85c., which he claimed was the market value of a first-class skin, or otherwise he would have a skin at his shop for me inside of ten days. Must I accept either of his offers, or can I successfully sue for what I think is reasonable value for my sheepskin, and also for the time and trouble of driving so much for nothing? SUBSCRIBER.

Ans.—You are not obliged to accept either offer, and it is open to you to sue him for the value of your sheepskin, tanned and colored, but not for trouble or loss of time. The matter, however, although no doubt very annoying, is so small that it would not pay you to go to court with it, and we would advise you to compromise.

Why do "Page Fences Wear Best"?

BECAUSE—They are made of wire 50% stronger than Common Spring Steel Wire, so called. BECAUSE—The horizontal wires are COILED. Mind you, COILED, not CRIMPED. A COIL gives several times the elasticity that does a crimp. This COIL is what enables Page Fences to do with posts long distances apart.



Our prices are very low, as you can judge for yourself when we tell you that we can deliver an 8-wire, HIGH CARBON FENCE, to any station east of Manitoba, and wherever we have a dealer, an experienced man with the proper tools will assist in putting the fence on the posts, if the order is of fair size, for not to exceed 41 cents per rod. All of our other styles in proportion, some for less money and some more.

We have all kinds, some close mesh (19 bar, 57 inch), some light (5 bar, 36 inch), some heavy (all No. 9 gauge.)

The railroads use Page Fencing in large amounts. Practically every road in Canada is using it. Look at this list, the first four of which each have from 100 to 1,000 miles in use, and the others each have from 10 to 100 miles:

- Grand Trunk Ry. Canadian Pacific Ry. Intercolonial Ry. Canadian Northern Ry. Canada Atlantic Ry. Great Northern Ry. Quebec Southern Ry. Prince Edward Island Ry. Chateaugay & Northern Ry. Lake Erie & Detroit River Ry. Toronto, Hamilton & Buffalo Ry. Michigan Central Ry. Halifax & Southwestern Ry. Cape Breton Ry. Central Vermont Ry. Lindsay, Bobcaygeon & Pontypool Ry. Bay of Quinte Ry. Algoma Central Ry. Baie des Chaleurs Ry.

Now, you know railroad corporations do not buy large amounts of goods, and keep on buying the same kind year after year unless they prove by use to be good value. Railroad men now acknowledge that PAGE FENCE is the best and cheapest.

NOTE.—All Page Fences are now painted WHITE—our special distinguishing mark. Get the WHITE brand and you will have our make of fence.

Also Page Gates, from \$1.75 up. Ornamental Lawn Fence, from 20c. per running foot. Also Poultry Netting.

THE PAGE WIRE FENCE CO. LIMITED WALKERVILLE, ONT.

BRANCHES: MONTREAL TORONTO ST. JOHN WINNIPEG

"Page Fences Wear Best."

Advertisement for U. S. Cream Separator. Includes text: "The best workmen use the best tools." The Improved U. S. Cream Separator. Continues to prove that in the judgment of THE BEST workmen it Is the Best. Every one of the highest scores and the sweepstakes on Dairy Butter in the four World's Fair contests, at St. Louis were awarded to the products of the improved U. S. Cream Separator. Holds World's Record for Close Skimming. Investigate it, thoroughly, and you will use no other. THE VERMONT FARM MACHINE CO. BELLows FALLS, VT.

Advertisement for Joseph Rodgers & Sons Limited, Sheffield, England. Includes text: Please see that this EXACT MARK is on each blade. James Hutton & Co., Montreal, SOLE AGENTS IN CANADA.

Advertisement for Elm Grove Shorthorns. We have for sale one imported bull, Scottish Rex, No. (36107), sure and active. Also young bulls and heifers. For prices and particulars address W. G. SANDERS & SON, Box 1133, St. Thomas, Ont.

Advertisement for Maple Hill Stock Farm Scotch Shorthorns. of the Brawith Bud, Coecilia, Mayflower, Fashion and Daisy families. Herd headed by the grandly-bred Lavender bull, Wanderer's Star = 48685, by Wanderer's Last (imp.). Special offering: A few choice young bulls. WM. E. ELLIOTT & SONS, Guelph, Ont.

Advertisement for Queenston Heights Shorthorns. FOR SALE—Two Scotch bulls, from imported sires and dams. Strictly high-class and of choicest breeding. Write for particulars. HUDSON USHER, Queenston, Ont.

Advertisement for Spring Valley Shorthorns. Herd headed by Bapton Chancellor (imp.) 40359, 78286. Present offerings: Young stock of either sex, from choice Scotch families. Prices reasonable. For further particulars, apply to KYLE BROS., Ayr, Ont. Paris, G. T. R. Ayr, C. P. R.

Advertisement for Wm. Grainger & Son Hawthorne Herd of Deep-milking Shorthorns. Aberdeen Hero (imp.) at head of herd. Present offerings 6 good young bulls by Scotch sires. Come and see what we have, Londonboro Sta. & P.O.

Advertisement for Scotch-topped Shorthorns. Nine young bulls ready for service; also several heifers by Scottish Baron 40421 (imp.), for sale reasonable. Come soon and get first choice. H. GOLDING & SONS, Thamesford P. O. Stations, Thamesford, C.P.R.; Ingersoll, G.T.R.

Advertisement for Lakeview Shorthorns. Spley King (imp.) at head of herd. Young bulls for sale reasonably. For prices, etc., apply to THOS. ALLIN & BROS., OSHAWA, ONT.

Advertisement for For Sale—Shorthorns, Leicesters and Berkshires. Also Buff Orpington cockerels. Write for wants, or come and see. E. JEFFS & SON, Bond Head P. O. Bradford and Beeton Stas., G. T. R.

ADVERTISE IN THE FARMER'S ADVOCATE

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

QUESTIONS AND ANSWERS. Miscellaneous.

FURS AND HUNTERS' SUPPLIES.

Give the address of a firm in Toronto and one in Montreal that deal in furs and hunters' supplies?

YOUNG HUNTER.

Ans.—Such houses should make themselves known by advertising in the "Farmer's Advocate."

FRUIT-GROWING BOOKS—THE BEST PAPER

Kindly inform me where I could obtain a good text-book on the management of orchards and fruit-growing. Also what are terms of subscription to "Farmer's Advocate"? J. C. York Co., N. B.

Ans.—1. "Principles of Fruit-Growing," by L. H. Bailey, \$1.25, and "Amateur Fruit-growing," Green, 50c., may be ordered through this office.

2. The "Farmer's Advocate and Home Magazine" may be secured at \$1.50 per year, and is universally considered cheap at double the money.

SHIPPING EXPENSE FROM ENGLAND.

What would be the cost of shipping a one-year-old bull from Liverpool, England, to Toronto, Canada? F. H.

Ans.—Replying to this question, an experienced importer writes: "It depends upon the value of the animal and the attention and precaution you take. If the bull in question requires good care, then I would say the cost would be about \$125. If you are willing to trust to the class of fellows that follow the ships, this will lessen the cost, and it also depends whether you bring a man from Quebec to Toronto in charge. There are many things. Ordinary care would include the following costs: Liverpool to Quebec—freight, feed and a man on ship to care for animal, say \$40; quarantine, feed and care, 60 days, \$35; freight and a man in charge to Toronto, or a man only to Montreal from Quebec, \$15; incidentals, \$10; total, \$100. As stated, there is no regular charge in bringing one animal, and it remains with the shipper to make the best arrangements he can. Figuring on 60-day quarantine, the bull could be brought from Glasgow on Donaldson ships with a bunch and landed in Toronto for \$60."

Veterinary.

RINGBONE.

Have a colt that has been lame on hind leg for several weeks. I noticed a slight enlargement on luxar joints, as if ringboned. What would you recommend for cure?

Ans.—Have the colt fired for ringbone by V. S., and follow by a blister of biniodide of mercury, 1 dram, to 8 drams of lard. V.

SCRATCHES ON FILLY.

I have a filly has something like scratches on her legs; she also passes what looks like dead tapeworms. Drinks very little; seems rather constive; eats a lot of salt; hair rather dry; seems easily tired.

Ans.—A good ointment for scratches is composed of 1 dram of oxide of zinc to 6 drams of lard; rub once a day. For internal treatment give 2 ozs. of turpentine every day for a week, which will have to be administered in a drench; mix with a little water. At the end of the week give a ball. In my opinion the mare has not tapeworms, but just ordinary worms. V.

SCRATCHES.

What would be a safe remedy for scratches, in the case of a mare with foal?

Ans.—As the mare is in foal avoid purgatives. Give one ounce Fowler's solution of arsenic three times daily every alternate week as long as necessary. Poultice the heels with warm linseed meal with a little powdered charcoal for two days and nights; put fresh poultice on every eight hours, and then dress three times daily, with a lotion consisting of one ounce each, sulphate of zinc and acetate of lead, and two drams carbolic acid, to a pint of water. Do not wash the legs at all. If they get wet, rub them dry; if muddy, allow them to dry and then brush.



Milking Time

is the farmer's daily harvest. Unlike the raising of crops or of beef cattle the dairy account can be balanced almost daily. This enables the dairy man to know at any time whether he is getting all that he should on his investment. If the cow's food is not assimilated or is not of the right sort to make milk the results show at once in the milk pail. With these facts in view we ask every cow keeper to make this experiment.

If you have just one cow, weigh or measure the milk for ten days, then for ten days continue the same ration and add Dr. Hess Stock Food as directed; if you don't have a notable increase, sufficient to pay for the stock food many times over, your money will be refunded.

Or, if you have a herd, feed Dr. Hess Stock Food to every other cow down the line as you have them stationed; otherwise give to all cows exactly the same feed, continue this system of feeding two weeks, measure or weigh the milk of those getting the stock food, and those that don't. These tests will show that a greater quantity of milk is produced from the same ration when

Dr. Hess Stock Food

is fed. A. Holmquist, Moorhead, Minn., says: "I fed Dr. Hess Stock Food to my dairy herd of thirty cows, one feed a day for one week, and found that the flow of milk increased five gallons per day. I then gave two feeds per day and the milk increased to ten gallons per day. To further test the Stock Food I gave up feeding it and the milk decreased the ten gallons it had gained. I now feed Dr. Hess Stock Food regularly. It is not a condimental food, but a scientific stock tonic and laxative, the prescription of Dr. Hess (M.D., D.V.S.), that makes the grain and other foods digest properly, allowing the least possible amount of nutrition to pass off as waste, and relieves the minor stock ailments. Good alike for cattle, horses, hogs and sheep.

Dr. Hess Stock Food is sold on a written guarantee, 100 lbs. for \$7.00; 25 lb. pail \$2.00 (duty paid); smaller quantities at slight advance. Fed in small dose.

Remember, that from the 1st to the 10th of each month Dr. Hess will furnish veterinary advice and prescriptions free if you will mention this paper, state what 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.

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-e-a and Instant Louse Killer.

Instant Louse Killer Kills Lice



TROUT OREEK SHORTHORNS

A few very choice bulls and females, both imp. and home-bred, with superior breeding.

Send for Catalogue.

JAMES SMITH, W. D. FLATT,
om Manager. Hamilton, Ont.

MAPLE SHADE SHORTHORNS



Nine young bulls fit for service. Showing the finest Cruickshank breeding.

Good Size, Quality, Flesh and Bone.

Inspection invited. Catalogues on application.

JOHN DRYDEN & SON, Brooklin P.O., Ont.

15 YOUNG BULLS



Mostly imported and from imp. sire and dam. Also a choice lot of cows and heifers.

All Scotch

ARTHUR JOHNSTON

om GREENWOOD, ONT.

Pickering, G. T. R. Claremont, C. P. R.

PINE GROVE STOCK FARM

ROOKLAND, ONTARIO, CANADA.

Breeders of choice

SCOTCH SHORTHORNS

and SHROPSHIRE.

W. C. EDWARDS & CO., Ltd., Props.

JOSEPH W. BARNET, Manager. om

T. DOUGLAS & SONS,

Strathroy, Ontario.

SHORTHORNS and CLYDESDALES

Present offerings: 12 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 reason-

able. Visitors welcome. Farm one mile from

town. om

Spring Grove Stock Farm

SHORTHORN CATTLE & LINCOLN SHEEP.

First herd prize and sweepstake,

Toronto Exhibition, 3 years in suc-

cession. Herd headed by the im-

ported Duthie-bred bull, Rosy

Morning, and White Hall Ram-

den. Present crop of calves

sired by Imp. Prince Sunbeam,

1st Toronto, 1903. High-class

Shorthorns of all ages for sale.

Particulars from om

T. E. ROBSON, ILBERTON, ONT.

Barren Cow Cure makes any animal under

10 years old breed, or re-

fund money. Given in feed twice a day. Mr.

J. B. Ketchen, Dentonia Park Farm, Coleman,

Ont., says: "Have used your Barren Cow

Cure very successfully on a very hard case.

Particulars from om

L. F. SELLECK, Morrisburg, Ont

R. & S. NICHOLSON SCOTCH SHORTHORNS

Present offering: Seven young bulls of serviceable age; good ones. Prices right. For particulars write to above firm. o

Parkhill Sta. and Telegraph. SYLVAN, ONT.

12 SHORTHORN BULLS 20 Cows and Heifers

Good ones, Scotch-bred, at moderate prices. Catalogues on application. o

H. SMITH, Exeter, Huron Co., Ont.

Station adjoins farm. Long-distance telephone in residence.

A. EDWARD MEYER Box 378, Guelph, Ont.

Breeder of High-class Scotch Shorthorns

Princess Royals, Brawith Buds, Villages, Nonpareils, Minas, Bessies, Clarets, Urys and others. Herd bulls, imp. Chief of Stars (72215), 145417, =32076=, Lovely Prince =50757=. Young stock for sale. Correspondence solicited. Visitors welcome. Telephone in house.

14 Shorthorn Bulls

Choice Scotch-bred ones, 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. om

Shorthorns, 6 bulls, 6 to 18 mos., by Provoost

=37865=. For prices write to

RICHARD WILKIN,

Springfield Stock Farm. o Harriston, Ont.

THOS. MERCER, Box 33, Markdale, Ont.

Breeder and importer of

CLYDESDALE HORSES, SHORTHORN

CATTLE and YORKSHIRE PIGS.

Car lots a specialty. o

PLEASE DON'T Imagine because we sold some cattle at Ham-

ilton that we have none left to offer.

WE HAVE some good SHORTHORNS, both male and female.

IF YOU want any, write us specification, and we will tell you frankly whether we have it.

JOHN CLANCY, H. CARGILL & SON,

Manager. om Cargill, Ont.

MAPLE LODGE STOCK FARM

1854.

Eight very choice young bulls, of the best breeding and from first-class milking cows. A few handsome heifers also for sale, and a few Leicesters. om

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

Shorthorns and Yorkshires

Present offerings: Young stock, either sex. For price and description write to

W. J. MITTON

Mapleton Park Farm. THAMESVILLE, ONT.

HOLLYMOUNT STOCK FARM.

SCOTCH SHORTHORNS.

Young stock, either sex, from imp. sire and dams, for sale. For price and particulars write to

W. J. THOMPSON, Mitchell, Ont. o

High-Shorthorn Cattle AND OXFORD CLASS DOWN SHEEP

Present offerings: Young stock, either sex. For prices and particulars write to

JAS. TOLTON & SON, Walkerton, Ont.

SHORTHORNS FOR SALE

Both male and female, different ages. Prices very reasonable. For particulars write to

CHAS. E. PORTER,

Tottenham Sta., G. T. R. Lloydtown, Ont.

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. o

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

QUESTIONS AND ANSWERS. Miscellaneous.

HANDLING INCUBATOR.

I would like to have someone who has had success with an incubator and brooder say through your paper what kind is the best to buy, and what his experience has been, and how much time and attention has to be given to incubator. I think this would be of benefit to many who would like to get one; but there are so many incubators advertised that one does not know which is best. M. D. F.

Ans.—This subject has been very fully treated in the last two issues of the "Farmer's Advocate."

CEMENT SILO QUERIES.

I purpose building a silo next summer, and would like to know from you or some of your intelligent readers who have had experience, the following information: I would like to make my silo of concrete (cement, sand and gravel) which is convenient.

1. Does the ensilage freeze worse than in a wooden silo?

2. Does it, if well plastered with Portland cement, absorb the moisture from the ensilage and leave it moulded worse than wood. J. N.

Ans.—1 and 2. No.

TO KILL LICE ON CATTLE.

What do you recommend for killing lice on cattle? J. L.

Ans.—This question has been asked and answered fifty times in these columns in the last two years. We have no settled opinion as to what is best, but would say that any of the sheep dips advertised are claimed to be effective. Any kind of grease or oil will kill them, but coal oil should only be used with twice the quantity of raw linseed oil, as if used alone it will blister. Tobacco juice is a sure thing for the purpose, and we have known common fly powder (pyrethrum) sifted into the hair from a flour-dredger to prove very effective.

TREATMENT FOR ABORTION.

Please let me know through your valuable paper what is the best disinfectant to use for injections for abortion in cows. How many times do cows need to be injected before cured of it, and what is the best kind of syringe to use? Would the same syringe used for the cows do for the bull too? Would giving the cows crude carbolic acid in the salt be as good for them as the pure carbolic acid in bran, for abortion? E. A.

Ans.—See answer to similar question in this issue.

RE ABORTION IN COWS.

1. Is abortion contagious? How long after a cow aborts would it be safe to mate her again, without danger of spreading the disease?

2. Could a man be fined for bringing a cow shortly after aborting and not telling the owner of the bull?

SUBSCRIBER.

Ans.—1. There is a species of abortion that is contagious. This question has been fully discussed in these columns recently. See Jan. 19th issue, page 79; also Feb. 2nd, page 172. As a rule, they should not be bred again for three or four months.

2. We do not think so.

ABORTION TREATMENT.

About three months ago one of our cows calved at seven months, calf dying few hours after birth. This week another did the same, calf also dying. Cows appear all right, and are milking well.

1. Do you think it is contagious abortion?

2. Would you advise giving our cows which are in calf the carbolic-acid mashes? If so, how often and for how long?

3. Where can we get fuller information regarding the abortion treatment than is contained in your issue of Jan. 19th, particularly the injecting with Nocard's solution and the coal-tar disinfectant? J. E.

Ans.—See Feb. 16th issue, page 16, and Dec. 16th, 1904, page 1767, for detailed treatment.

Free for a Post Card

It costs just one cent for you to get relief from Kidney and Bladder Troubles. A simple request on a post card brings a free sample box of Gin Pills. We don't ask you to buy. Simply try Gin Pills at our expense, and let them prove themselves all that we claim for them. And we know the samples will do you so much good that you will voluntarily buy Gin Pills until a complete cure is effected. We intend to give away

100,000 Boxes Free of Charge

in order to show our confidence in this remedy. We know what Gin Pills will do. We have implicit confidence in their power to relieve and cure all Kidney and Bladder Troubles. We know that you have only to try them to believe in them.

Gin Pills Never Fail to Cure.

All over Canada, Gin Pills are known as a certain and speedy cure for Inflammation of the Kidneys; Gout and Rheumatism, caused by uric acid in the blood; Catarrh of the Bladder; Painful and Suppressed Urination; "Burning" Urine; Gravel or Stone in the Bladder; Bed Wetting; Pains in the Back, and all other Kidney and Bladder Troubles.

Each Gin Pill contains all the medicinal pro-

perties of one and a half ounces of best Holland gin, without the alcohol, and combined with other curative agents of recognized value.

Don't Delay—Write To-day.

Don't put this off. If you have any of these troubles, don't run the risk of Bright's Disease or Chronic Cystitis. Write for a free sample of Gin Pills, and start yourself along the road to a certain cure.

Use a post card, ask for a free sample of Gin Pills, say in what paper you saw this advertisement, and sign your name and address. Write to-day—now—to

BOLE DRUG CO., Dept. V, Winnipeg, Man.

THOROLD CEMENT AND PORTLAND CEMENT

FOR BARN WALLS AND FLOORS, ROUSES, SILOS, PIGPENS, BENCHES, AND SEWERS, TILE, ABUTMENTS AND PIERCE FOR BRIDGES, GRANOLITHIC SIDEWALKS; IN FACT, FOR ALL WORK THAT CAN BE DONE WITH CEMENT.

Estate of John Battle THOROLD, ONT. WHOLESALE IN CAR LOTS ONLY.

RIDGEWOOD PARK STOCK FARM SCOTCH SHORTHORNS

Special offering, on account of shortage of feed: Imp. and Canadian bred cows and heifers, some first-class show stuff of the leading families, including Missies, Mayflowers and Village Girls, and by such sires as Imp. Favorite (83469) E. H. B., Imp. Nonpareil Archer and Marquis of Zenda. No fancy prices. Satisfaction guaranteed. Visitors met by appointment and always welcome. E. C. & E. C. ATTRILL, Goderich, Ont.

Belvoir Stock Farm. SHORTHORN BULLS, of various ages; imported and home-bred. They range from herd headers to farmers' bulls, by imp. Gay Lothario, a Cruickshank Lavender. CLYDE STALLION, 2 years old; sire imp. and dam a winner, grandam 1st Highland Societies' Show. YORKSHIRES—Sows and boars, various ages; not akin. Three imp. boars and 5 imp. sows to select from, and their progeny. Prices right. Also honorable dealing. RICHARD GIBSON, Delaware, Ont.

Three Scotch-topped Shorthorn Bulls

FOR SALE. Two got by Prince Gloster = 40998, and one by Collynie Archer (imp.) = 28860. The names of such bulls as Royal Barmpton (imp.) = 217, Stanley (imp.) = 241, Prince of the Realm (imp.) = 2730, Earl of March = 1732 and Revenue = 21053 appear in the pedigrees. Good individuals; must be sold. Inspection solicited. Visitors welcome. Stations: Myrtle, C. P. R.; Brooklin, G. T. R. W. M. D. DYER, Columbus, Ont.

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

J. WATT & SON—1 imp. BULL; also a number of imported and home-bred cows and heifers, in calf or with calves at foot from (imp.) Royal Archer and Royal Star. Salem P. O., Elora station, G. T. R. & C. P. R. O.

BELMAR PARC SHORTHORNS

We offer six splendid young Scotch bulls and a really choice lot of females at prices that will pay you. Address: PETER WHITE, JR., PEMBROKE, ONT.

SHORTHORNS!

One red bull calf, and one red three-year-old heifer to calf May 1st. All from good milking strain. To be sold cheap.

GLENAVON STOCK FARM, W. B. Roberts, St. Thomas Stn. Sparta P. O.

LOCUST HEDGE STOCK FARM SHORTHORNS

Seven grand young bulls, fit for service, sired by the Princess Royal bull Imp. Prince of the Forest = 40409.

JAS. & ED. CHINNICK, Chatham, Ont. Box 425.

1864 - HILLHURST FARM - 1905

Scotch and Scotch-topped SHORTHORNS Broad Scotch = 46315 = (Stittton Buttery) at head of herd. FOR SALE: Young bulls by Lord Mountsphen, Joy of Morning and Scottish Beau, 12 to 18 months old. Prices moderate.

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

SHORTHORNS and CLYDESDALES

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

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

ELMHEDGE SCOTCH SHORTHORNS. Stamfords, Minas, Nonpareils, Crimson Flowers, Marr Floras and Lavinas. Our herd will stand comparison with any. We reserve nothing: 45 head of both sexes, all ages, for sale. O James Bowes, Strathairn P. O., Neaford Sta.

High-class Shorthorns—We have now for sale one bull, 2-year-old prizewinner, and one yearling; also a number of young cows and heifers. BROWN BROS., Lakeview Farm, Orono, Ont. Newcastle Sta., G. T. R.

Shorthorns—We have for sale several young bulls ready for service, sired by Royal Duke, he by Royal Sailor (imp.). Also a few heifers and cows, bred to Wandering Count, by Wanderer's Last (imp.). J. R. McOALLUM & SONS, Iona Stn., Ont.

R. A. & J. A. WATT

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

J. A. LATTIMER, Woodstock, Ontario, breeder of Scotch Shorthorns. Present offering: A few extra good bulls, some by imp. sires and of best families. Herd headed by Bucephalus of Dalmeny, Imp. Correspondence solicited.

DON'T WAIT BE UP-TO-DATE

And buy some choice young Jerseys. Two bulls and a number of A No. 1 cows and heifers from great milkers. Also collic pups: W. W. EVERITT, Dun-edin Park Farm Box 552, Chatham, Ont.

What Offers for the Golden Lad—Nameless bull "Golden Name" dropped May 5th, 1901. Sire "Great Name" (imp.), dam "Mystery of Amherst" (imp.), bred by Charles Lantz Estate. To avoid inbreeding, I am prepared to sell this bull cheap. His stock is O. K. F. S. WETHERBALL, Cookshire, Que. Rushton Farm.

140 - JERSEYS - 140

to choose from. 74 First Prizes, 1904. We have what you want, male or female. B. H. BULL & SON, Brampton, Ont. Phone 68.

Woodbine Holsteins

Herd headed by Sir Meothilde Posch, whose four nearest ancestors average 25 lbs. of butter in 7 days in official tests. Cows, heifers and young bulls, sired by Homestead Albino Paul DeKof, a grandson of DeKof 2nd Paul DeKof, sire of 41 A. B. O. daughters, the greatest sire of the breed. Write for extended pedigrees and prices.

A. KENNEDY, AGR. ONT.

MAPLE PARK FARM HOLSTEINS. Two choice bull calves for sale, sire Homestead Albino Paul De Kof. Also two 1-year-old heifers with 70-lb. dams. S. MAOKLIN, Prop., Streetsville, Ont.

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

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

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

