



the mixed grain for feed is the heaviest on retord. They are also themselves a heavy yielder. One of our growers has a crop of 1,800 bushels of cleaned outs off 21 acres. Prof. Zavits, of the O. A. O., Guslph, reports on the Daubeny cats as follows :

"We have grown the Daubeny outs for a number of years, and find this variety to be one of the very eacli-It is one of the best yielders est. of the very early varieties of cats. It has a medium length of straw, a spreading head, and a white grain. The oats have an exceedingly thin hull, and, although they are not as attractive in appearance as some other varieties, they are of good quality. The Daubeny variety of eats is one of the best which we have tested for the purpose of sowing with Mandscheurl or other Common. varieties of barley which ripes about the same time as these variaties ripen. Such a mixture usually yields well and ripens uniformly.

" O. A. Zavits, "Ontario Agricultural College." Price, \$1.00 per bush. ; bags, each 18c. | bushel on application.

variety, bearded like the Mandscheuri barley, but it is black. Those who have examined this barley in the straw are loud in their praises, pronouncing it the finest appearing barley they have ever seen. It has a very stiff straw, and stands up well. Head is long and heavy; grain large and plump, but thin in the hull. Is full of fresh new vigor, and is the hardlest and healthiest variety known. It is well adapted for rich land. The stock now effered was grown on a clay loam in this locality. We are the only seed-house in Canada having this barley for sale, and every farmer should sow a plot to get into the seed of it.

Hulless barley. It is a six - rowed

Price to one and all as long as our stock holds out : 1 lb. 25c., 8 lbs. 706., 5 lbs. \$1.00, postpaid to any address in Canada. Prices by the

We are also Stocked with the Following :

Irish W	hite	Oats			0.76	White
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M.CO.K.MI HARVESTE Works at Hamilton, Ont., and Chicago, U. S. A. Government ests have proven that 80 per cent of all the unsprayed fruits going 10 waste might be marketed at top prices if sprayed with a Nine-tenths of the labor can be saved where much whitewashin or painting is necessary. We want you to know why Spin motors will save your fruit while ordinary sprayers fail. The buy ing of a Sprayer is the matter of a moment, yet a mistake is a costly experience it means the loss of your labor and chemical, and affects your profits. We want you to why the Spramotor was awarded First Place in the Spraying Contest, and the Gold Medal at Pan American Exposition. We want you to know why Sprayers should be made of good We want you to know why Spramotors have more points of excellence than all others combined. We want to supply you with the facts, and help you to svoid mistakes. Will you let us try? Send for our Treatise, "A Gold Mine on Your Farm," on the diseases of fruit trees and their remedies. It's Free.

SPRAMOTOR CO., BUFFALO, N.Y. and LONDON, CAN.

The PERSEVERE AND SUCCEED." AND AND AND MAGAZINE. ESTABLISHED 1866.

"PERSEVERE AND SUCCEED."

REGESTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

VOL. XXXIX.

LONDON, ONT., AND WINNIPEG, MAN., APRIL 7, 1904.

No. 602

EDITORIAL.

Grow Clover.

Successful farmers have long known from exrerience that good grain crops generally follow clover. They have not always felt sure they could explain why, but they knew it all the same, and continued to sow clover because experience had taught them that it was a first-class food for farm stock, and left the land in first-class condition for producing other crops. Now the scientists assure us that one of the secrets of its value is that clover has the power to attract and fix in itself the free nitrogen of the atmosphere, one of the most valuable fertilizing agencies known, costing when purchased in the form of a commercial fertilizer about fifteen cents per pound. This is not all used in the development of the clover itself, but being stored in the nodules of its roots is imparted to the soil, and when plowed down the decayed roots not only furnish suitable food for the plants of the following crops, but also supply humus or vegetable matter to keep the land friable and less liable to run together and bake under the influence of the sun after a heavy rain. Land having a good supply of humus suffers less from drouth; it loses less moisture through evaporation, and the plants are not hampered by a hard crust, preventing the admission and circulation of air, which is essential to healthy development in the vegetable as in the animal kingdom. Another benefit to the soil from clover is that its roots run deep into the subsoil from two to four feet, and draw from its depths mineral elements of fertility, such as potash and phosphorus, which not only feed the clover crop, but when these roots decay enrich the land for future crops. Clover is thus blessed in its death as well as in its life, and, moreover, its deep running roots act as subsoilers, aerating, draining and deepening the subsoil so that roots of other crops find there congenial conditions, and thrive accordingly The value of clover as a stock food is, we believe, far from being fully appreciated. It is in itself as pasture, or when cut early and well cured, dependent upon the man and the market. The man the most complete food for animals grown on the farm, and is invaluable in that when fed with other feeds it makes them worth more than they would otherwise be. Corn silage, straw and timothy hay are deficient in the flesh-forming elements, and clover is necessary to a balanced ration, from which the best results in feeding can only be had. There is a danger, since corn silage is becoming so popular as a cheap and convenient stock food, of depending too much upon it. It needs the mixture of clover to render it most effectual in the production of flesh, milk and butter.

ed, sowing the grain not too thickly and where practicable, leaving the stubble a good height to try, alone are sufficient to make poultry-raising shade the clover plants, and allowing no stock to profitable, or that one class of fruit will in all pasture on it the first fall.

Sugar Beets in England.

In view of the rapid growth of the beet-sugar ind stry in the United States, and its establishment in Canada, our readers will be interested in a movement to make England a beet-sugar producing country. The London Daily Chronicle announces that the cultivation of sugar beets and their manufacture into sugar is now likely to take definite shape. Mr. Segmund Stein, of Liverpool, a sugar expert, long associated with the refining industry, says : " There is no doubt that sugar beets can be grown in this country (England), as well as and even better than on the continent. We have grown the beet in every county in England, Scotland and Ireland for years past, and we have obtained splendid results. The Central Chamber of Agriculture has also satisfied itself by experiment and analysis that the work can be done." Many members of the peerage and other land owners have conducted experiments in beetgrowing, and are taking a keen interest in the undertaking, which Mr. Stein proposes to launch on an extensive scale.

Poultry and Fruit Farming.

One of our readers writes us that he can buy forty acres of sandy loam, forty-five miles from Toronto, Ontario, and one-half mile from the railway station. He has a very fair knowledge of fruit-growing and poultry-raising, and would li'e to know what we think his chances are for success in these branches of farming. This communication has all the ear-marks of a practical thinker and a careful manager. The proprietor will be his own manager and laborer. The income from his efforts will be undivided, and as far as human foresight can penetrate, we can see

places, by sowing liberally of clean, sound clover until the exact need is known. Do not get the Idea that broilers, or winter eggs, or export poulcases ensure as good returns as a larger selection. In this age of intensive living, one must endeavor to crowd some profitable work into every day of the year; find out what class of work has been most profitable, and try to extend the period over which it can be followed. Study the requirements of the markets, and give people what they want, whether or not it is the best thing for them. The buyer considers himself the best judge of his own needs.

Where to Locate the Ontario Forestry School.

One of the most important questions with which Canada is face to face at the present time is the perpetuation, extension and proper management of its timber lands, both public and private. The annual sale of timber limits by Government goes merrily on, and the demand for wood seems to increase rather than diminish. The public domain is thus divested of its timber wealth, and in all the older settled portions of the country the way in which our private belts of bush are swept away by the timber buyer, either for lumber or fuel, is something appalling. It is high time that a halt was called and a policy of preservation and some systematic forestry policy adopted in all the Provinces, as well as upon the lands still under Federal control. The Provincial Minister of Agriculture for Ontario has done well to set apart at the Agricultural College, Guelph, an area where young trees suitable for planting will be grown. In very few years a distribution of these trees will begin, so that those who desire to re-forest can do so. At the recent annual meeting of the Canadian Forestry Association it was related how that for seventy years the family of Sir Henry Joly de Lothiniere has derived a large income from a bush land estate. This was done by taking care that

We believe it pays to sow clover with nearly all spring crops, even if the land is to be plowed the coming fall, as the pasture it affords and the fertility it imparts when plowed down will well repay the cost of the seed, and where a catch is reasenably assured it is good practice to plow down after the first crop of hay has been taken off, as under this plan the supply of humus in the soil will be well maintained.

We are well aware of the difficulty of ensuring a catch in dry seasons on clay lands, and of the several things to be avoided. Do not make a danger, when the catch is all right, of the plants being scorched to death by the sun after the nurse crop has been harvested. These difficulties can be best overcome by a light top dressing of manure in winter or early spring, especially on the high turns. Do not build expensive houses for poultry ally of agriculture, the School of Forestry, and

no serious objection to the enterprise.

The success of ventures such as this is largely must understand his business, and be practical. Fruit-growing and poultry-raising look simple enough, but there is a legion of details in connection with each that one must be familiar with before he can consider himself well fitted to manage such business. The peculiar feature of such enterprises is that they seldom materialize just as they are figured out on paper. Some things quite unforeseen frequently occur to discount the prospect, but the man of resources and a little experience will eventually surmount such difficultie; as may arise. In Canada to-day there are scores of men making a good living in just such a way as our correspondent contemplates. The market for such products as he intends to produce is good, and has every indication of improving. With the settlement of our Northwest there is bound to be developed an enormous market for fruit, and the industrial progress of older Canada is creating a good market for poultry and eggs; added to this there is the ever-increasing demand for fruit and fowl from Great Britain.

In going into this branch of farming there are sentimental fad of any one particular breed, or

only mature trees were cut, and no damage done to the young and growing timber.

It would seem a foregone conclusion, that in the Province of Ontario a school or college of forestry is to be established. It is the branch of agriculture which has been most completely ignored, so far as educating the farmer of to-day or the agriculturist of the future is concerned.

The inauguration of such a school being decided upon, the next point is where shall it be located ? The "Farmer's Advocate" has no axe to grind, and no local interest to serve in discuscing this question, but we desire the future well-being of the proposed school to be secured, and the interests of agriculture, which contributes so large a share of the taxes in the Province of Ontario, respected. Fortunately, this is not a political party question, but there is a right and wrong about it which should be clearly recognized. Through the life work of Dr. Mills and others, the Ontario Agricultural College and farm have attained a position of commanding opportunity that is attracting more and more agricultural students to its doors every year, and diffusing more and greater influence abroad. From the ranks of the students of this institution will the foresters of the future be drawn. At it all the allied subjects, such as botany, entomology, geology, and so on, class of fruit. On the other hand do not be too are made specialities. In fact, the whole course runs chary of any. Begin in a small way, and in- contemporaneously with that of forestry. Here crease in those branches that promise the best re- then, is the proper and natural home for the new

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the farmers of the Province should insist that it be there located whenever it is established.

The proposition has been made to establish the proposed school in the City of Toronto, in connection with the Provincial University, but we cannot think that it would be in the interests of forestry to do so. What likelihood would there be of attracting forestry students from the ranks of the votaries of the "professions" who throng the University, or of effectually reaching with its influence the agricultural community? It might in some way or other suit the University, but we

HORSES

Joint III or Navel III in Foals.

A large number of foals perish every year from a disease called joint or navel ill, sometimes called arthritis, from the fact that the joints suffer from acute inflammation. The disease is more prevalent some years than others, and in some localities it is much more frequently noticed than in others. In fact, in some years it prevails very extensively, and appears to be almost epizootic in some localities.

CAUSES .- Until the last decade or so various opinions existed as to the cause. Some claimed it was congenital, others that it occurred only in foals that did not receive the first milk (the colostrum) of the dam; others that it was due to an impure condition of the milk of the dam; others that it was due to the insufficient ingestion of calcareous salts, and orginated during intrauterine life or the sucking period ; others that it was caused by exposure or chills. These and other theories were advanced as causes, but close observation tended to prove the incorrectness of each. It has been demonstrated beyond doubt to be due to a germ that exists in the earth or the dust, etc., on stable floors, and which gains entrance to the circulation by means of the navel opening, and having an affinity for articulations it attacks the joints.

SYMPTOMS. - The first symptoms usually shown are difficulty in moving, and an apparent stiffness and soreness of some of the joints; the hocks are probably the most frequently involved, next the knees, but any of the joints may be attacked, and frequently several, either simultaneously or gradually, one after the other. In rare cases the stiffness appears before any visible alteration of structure, but usually there is a noticeable swelling and soreness to pressure. Temperature is increased, and usually respiration is hurried. The little animal has difficulty in rising, and progression is more or less painful, according to the joint or joints attacked, and the severity of the attack. The desire for nourishment is diminished, and he sucks very little and soon lies down again. He soon becomes emaciated and very weak. The swellings of the joints and the soreness increase; the swellings become puffy, and if lanced or allowed to burst a muddy colored, thin fluid escapes. In some cases abscess after abscess of this nature forms; in others the progress is slow and abscesses do not form, or if present contain little fluid and do not rupture. In most cases the articular cartilages of the joints become destroyed as a result of the disease, and upon manipulation the denuded bones of the joint can be felt and heard grating against each other. Emaciation, weakness and refusal to take nourishment gradually and in many cases rapidly increase; he loses all power to rise or move if lifted, and soon dies. In some cases the symptoms are complicated by diarrhea. The disease is noticed in two to four days, to possibly as many weeks, after birth, usually not later than ten days, and the duration is also variable. In many cases death results in a few days, while in others the symptoms are not so severe, develop more slowly, and, as a consequence, the foal will live longer, possibly for some weeks.

TREATMENT.-This is seldom successful, and when by very careful attention and nursing the jures the leather. The slit need not be sewed up life of the foal may be saved, recovery is usually only partial, for unless the progress of the disease be arrested, the articular cartilages, as mentioned, become destroyed, and when this has occurred they will never be reproduced, and, as a consequence, the bones become united by bony union, which renders the animal more or less a cripple, and worthless. Curative treatment consists in an endeavor to allay local inflammation by the application of heat, either in the form of warm poultices or bathing with warm water and the use of an anodyne lotion, as tincture of opium, 4 ozs.; chloroform, 1 oz.; acetate of lead, 1 oz.; water to make a pint. In the meantime means must be taken to destroy the germs, and the administration of about 5 grs. iodide of potash in a little of the mother's milk about every six or eight hours gives probably the best results. It is also good practice to give the drug to the dam, also in dram doses, twice daily. The strength of the foal must be sustained by holding him up so that he can suck, and if he refuses to do so he must be given his dam's milk in small quantities, say 2 to 6 ozs., according to size and age, frequently, say every hour, or at most every two hours. As has been stated, treatment in a well-established case entails a great amount of time and attention, and is seldom followed by success, hence we must depend largely upon preventive measures. When we know that the trouble is due to the entrance through the navel opening of a germ, we also know that if this can be prevented the disease will not appear. In the first place, if the mare is about to foal in the stable we should see that should be regularly and thoroughly cleaned, and the Dominich.

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the floor covered occasionally with blacked lime. or washed with a germ-destroying agent, as say a five per cent. solution of carbolic acid. If she is going to foal outside, all we can do in this way is to see that she has a nice, clean plot of grass, where no stagnant water or mud holes exist. In addition, we should have a bottle of some good anticeptic ready, such as a five per cent. solution of carbolic acid, zenoleum, creolin, kreso, or other product of coal tar, or a strong solution of corrosive sublimate, say 15 grs. to a pint of water, As soon as possible after birth the navel string and opening should be thoroughly dressed with the solution (I may say that I prefer the last mentioned), and the dressing should be repeated four or five times daily until the opening has closed and healed. This prevents the germs from entering, and destroys any that may be gaining entrance. If these precautions are properly carried out the disease will seldom or never develop.

" WHIP "

FOUNDED 1866

To Prevent Galled Shoulders.

During spring work farm horses are often very much troubled with galled shoulders. The chief reason for this is that during winter they have little or no work to do, and their shoulders become tender. When spring comes they are expected to do a full day's work without any preparation, and sore shoulders is the result.

To expect a horse to tug faithfully at his load when his collar is pressing into the bare, bleeding flesh, shows lack of common judgment, combined with cruelty. We can easily understand how a horse working under such adverse conditions would lose in flesh as well as mettle. For such cases the old proverb fits admirably, " An ounce of prevention," etc., and in this connection we would advise bathing the shoulders every evening with strong salt water for a month if possible before horse work in the field commences. If the animal can be worked a little, so much the better, but in such cases always wash the shoulders with pure water before applying the salt water. If this is done, and the collar fits, there will be no galls. The second thing is to see that the collar fits the shoulder. The collar should fit snug, right close to the neck all along the portion to which the draft is applied, but should not be so tight near the top as to pinch that part of the neck. Underneath the neck in the center there should be an inch space when the animal is pulling, so that his wind may not be interfered with. Never buy a collar without fitting it on the horse for which it is intended, and do not change collars from horse to horse. Some collars have hard spots in them, and others soft, spongy places ; buy neither. Some collars are harder on one side than the other; these, too, should be avoided. One with a uniform, moderately-hard filling is preferred. If it is impossible to get one that fits, one that is of proper length and of good quality may be fitted by cutting a slit under the hames opposite the part that does not suit, and by either taking out or inserting filling the proper form can be made. Then the face of the collar may be hammered where such is needed to give the proper shape, with a fairly large, smooth round stick. Do not use a hammer or square stick, as such often in-

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are very sure it would not be in the interests of the school itself.

Through their representatives in the Legislature the agriculturists of the Province should insist that the school should be established in its proper place, in conjunction with the Agricultural College at Guelph.

What our Friends are Saying.

Amos Rittenhouse, Haldimand Co., Ont. : Enclosed find our renewal for another year. We are pleased with the "Advocate," as it is practical and up-to-date.

M. E. Bebee, Grey Co., Ont. : The change to a weekly you so generously made in our paper, the "Farmer's Advocate," I am sure will be appreciated by many, including myself.

S. G. Catch, Brome Co., Que. : I enjoy reading the paper very much, and think no farmer's home should be without it.

James G. Darke, Wentworth Co., Ont. : think your paper is of very much importance to anyone who has stock, and also as for other information.

Duncan A. Ross, Glengarry Co., Ont. : I am very much pleased with the "Advocate" since it has been changed to a weekly, and I feel sure its all possible precautions are taken in the way of influence will have a wonderful effect for good upon cleanliness and anticeptic measures. The stall the farmers of this country.

unless quite long, for the hames will hide it.

Leather-faced collars are considered the best, and by applying a very little oil occasionally, just enough to keep the leather pliable, but under no consideration sufficient to ooze out on the shoulder, the collars will wear well and the danger of galls will be lessened. It goes without saying that all collars should be kept scrupulously clean. Each morning the face should be scraped with a dull knife, or some similar instrument, and then rubbed off with a clean, dry cloth. Keep the mane as much as possible from under the collar, and carefully keep whatever hair there is on top of the horse's neck clean. If this is allowed to become matted, a sore neck is certain if the animal be worked hard.

If the harness, including the collar, be kept pliable by oiling, the horse will do his work with less nervous wear, and, consequently, maintain his flesh under a heavier strain. Bathing the shoulders with salt water should be continued for some time after spring work begins.

Bigger and Better all the Time.

A. E. Main, Richmond Co., Que. : I saw in the "Farmer's Advocate" a short time ago a letter from my friend and neighbor, Mr. P. P. Fortner, of Dalking, in which he said that he had taken the "Advocate" since 1874. Well, I think that I can say that we have taken it longer than that. My father subscribed for the "Advocate" I think in 1866, and we have taken it ever since. It was only a small paper then, and has steadily kept growing and getting better every year, and it is, I think, second to no agricultural paper in

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APRIL 7, 1904

What Constitutes a General-purpose Horse.

For the past ten or twelve years I have noticed the general-purpose horse class of the Toronto Exhibition, and have studied over it. Is the horse of 1,350 pounds a proper general-purpose horse or not? As the time will soon be on when the directors of our exhibitions will be revising their prize-lists, I have thought the present an opportune time to raise this question. The matured general-purpose horse in showing order not exceeding 1,350 pounds, I claim is too light when put to all kinds of general-purpose work. I admit 1.350 pounds would not be too heavy for a saddle or buggy, but three farmers out of every four, even if they only keep three horses, will have a light horse to run in the buggy, but for ten months in the year horses from fourteen to fifteen cwt. suit him best, for if he goes to market with any kind of a load he wants a horse with some weight, and I take notice that nine out of every ten teams weigh fourteen cwt. and up to fifteen cwt., and these are amongst the very best generalpurpose horses. The average farmer will say that weight suits him best, and from my years of experience I have found that to cultivate the land properly fourteen or fifteen cwt. horses are the hest. If we do not attend to the cultivating of our land and other farm work, which needs some strength and weight, and let the saddle and buggy take a second place, we will not thrive long in I have noticed some years of late at farming. Toronto, first-class, sound teams of geldings and mares, clean-legged, plump, round, even teams, sent to the stable because they were too heavy, weighing 1,410 pounds to 1,430 pounds, and a team getting first prize that never saw a plow or farming implement, and the team that was rejected worth three times as much money, and I am sure that if any farmer was asked which team was of the most use to him he would take the one rejected for being a little over 1,400 pounds. Then in my view of the matter we don't need judges so much to judge the qualities of the class as we need a good honest weigh master. But I think that the most of our Canadian farmers will agree with me, that a general-purpose horse between 14 and 15 cwt. is the right style for the class, and with this limit I am sure the exhibition would see far more teams in that class, and surely it is wiser to encourage farmers and the stockmen by giving them a chance to show their general-purpose teams with some hope of winning, instead of giving the prize money in that class to horses sired by Thoroughbred and trotting stallions, and which would be more in place in the carriage or road class, but which are entered in the generalpurpose class because they are not good enough to win in their proper place.

York Co., Ont. FARMER EXHIBITOR.

The Benefits of Inspection of Horses.

The results of a system of veterinary inspection which has been carried out for a number of years by the Shire Horse Society of Great Britain will be of interest to all hors horse, as shown at Islington annually, is to-day, undoubtedly, one of the freest from hereditary unsoundness of any breed of horses. At the recent London Show of the Shire Horse Society, no fewer than 347 animals out of the total of 366 examined succeeded in passing the veterinary inspection, only 19 horses having to be rejected. The "faults" of these rejected ones were: Sidebone, 6; roarer, 1; whistler, 2; cataract, 2; stringhalt, 2; shiverer, 3; scirrhus cord, 1; bursal enlargement of hock, 1; lame, 1. Of the nineteen rejected, six were stallions, seven mares, and six geldings. Of the six stallions, two were whistlers, one a roarer, and one a shiverer, while one had cataract and one stringhalt. Sir Albert Muntz, in presenting the report to the members of the society, referred to the fact that not one stallion had been cast for sidebone, and it showed an immense progress and improvement achieved during the period of the society' shows

THE FARMERS ADVOCATE.

STOCK.

Dual-purpose Cows.

A writer in the London Live-stock Journal, discussing the dual-purpose cow, says :

Most people are aware that the reason of the disappearance of the milking tendency in so many fashionable Shorthorns must be looked for in the pursuit of the square, solid shape and thick flesh which took its rise with the development of the show system, and the demand for that type which sprang up from abroad. Beef generally sold well and milk was comparatively at a discount, consequently it became necessary to breed cows which, seen in profile, should present an outline as near as possible to a parallelogram, with the fore quarters as heavily formed as the hind. In this endeavor our breeders succeeded, but in so doing some sacrificed more than they bargained for. They got the beef, but they lost the milk, and in building up a handsome butcher's beast they made her almost useless for the dairy.

Nature seems to have ordained that a large, well-shaped udder shall not accompany heavy fore quarters and thick flesh with a tendency to put on fat, and in the writer's opinion the two things will never be combined. 'Times have changed, the cards have been shuffled, and now we find that milk is almost the farmer's only monopoly, and if the Shorthorn is to hold its place as the great national breed, it is time to reconsider the principles of its breeding. For those who prefer to do so, it is, of course, open to adhere to exclusive beef points. But not only does the population increase, but milk is becoming every year more and more a daily necessity for the people, who will doubtless become more particular, and insist on being supplied with a pure article, and that, too, in a perfectly fresh condition.

After all, the question of beauty in an animal is only a matter of taste, and we may learn to admire a Shorthorn cow with truly feminine character and possessing all the points which accompany a bountiful supply of milk. Take the Jersey cow, for example; in her we find beauty enough, though of a different type from that of the show-ring Shorthorn.

We may go further, and assert that there need be no sacrifice of beef, or at most very little, in Is Threshing Oats Necessary?

A breeder of pure-bred cattle asks the question, "Would it be profitable to feed cut oat-sheaves to cattle in preference to having the grain threshed and fed separately ?"

This is a question on which there is room for difference of opinion. Perhaps, if everything could be estimated, threshing would be no more expensive than chaffing, and its great advantage is that in feeding afterwards one knows exactly how much he is feeding, and whether the stock are making good use of their feed. As a general rule, in feeding cut sheaves one feeds considerably more grain than he is aware of. We are not prepared to say which is the more economical; perhaps some of our readers can ?

The "Embargo" Still.

From the Secretary of the Canadian Cattle Importers' Association, Mr. W. L. Pattullo, Dundee, Scotland, we have received a copy of the report of the meeting of a deputation with Lord Onslow, President of the British Board of Agriculture, asking for the removal of the restrictions on the importation of Canadian cattle into Great Britain. The movement is said to be gaining ground steadily, but Lord Onslow's reply shows that he was not seriously impressed by it. He pointed out that the falling off in Canadian "stores" had been more than made up by great increases in Irish store cattle, and this probably goes a long way in accounting for "the milk in the cocoanut." At a subsequent "indignation meet-At a subsequent " indignation meeting," the deputation unanimously decided to carry the battle to the polls-the masters of Parliament.

Care of Young Pigs.

The object should be to grow young pigs, not to fatten them. Time was when it was thought desirable to make and keep them fat from infancy to maturity, but fat meat is not wanted now, and the purpose is to produce lean meat, and lots of it. If a pig is made fat when it is young, it will grow into a short, thick, fat hog. If given plenty of exercise when young, and fed with foods not calculated to produce fat, but muscle or lean meat, it will grow lengthy and not wide-backed,

and will conform to the bacon type, making the best selling hog, and producing the most desirable glass of meat. Therefore, give the little pigs a chance to get out on the ground on fine days as soon as practicable after they are born, and give them the run of a piece of grass land during the first four or five months, feeding them fairly well, but not fattening them till the last month, or six weeks before marketing. With such treatment they will grow and weigh well and keep healthy. Many young pigs are killed by mistaken kindness in the first four weeks of their life. The feeder likes to see them thrive and get fat, they look so pretty, but some fine morning he finds the finest of the lot having a tired feeling, its sides going like a pair of bellows; it has the "thumps," fatty degeneration of the heart, or some such ailment. One after another dumps, and a pig is an awkward subject to doctor, restoring the pedigree Shorthorn to its old status and in nine cases out of ten retires to an early grave, and leaves a sad and disappointed feeder, and offtimes not a wiser, he failing to recognize the true cause of the trouble, but repeats the treatment the next year. Feed the sow well while nursing her litter, but let her and the piglets out for a run on the ground every day when the weather is suitable, and if they cannot go out, make them stir around in the pen, if it has to be done with a broom or a switch.



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The New Man Coming with More Sunlight.

F. R. Breckon, Halton Co., Ont. : Enclosed find new subscription and postal note for \$1.50 to cover same, which I am pleased to send you on behalf of your esteemed paper, and the good it cannot fail to do the new man coming into more sunlight.

Has the address label on your Farmer's Advocate been changed to 1904? If not, your subscription remains unpaid. Kindly remit at once.

Prince Romeo (8144).

Imported Clydesdale stallion. Sire Prince of Wales (673); dam Best o' Times (5582), by Old Times (579), sire of Ludy Diana (winner of first at Highland Society Show) and Stately City (first and sweepstakes, Toronto), grandsire of Baron Romeo and Royal Edward. Owned by James Henderson, Belton, Ont.

as a dairy animal. By all means, let us retain size and weight, though the distribution of flesh may be altered in the process. The steers would still be good beef producers, and the cows, when dry, would feed to a great weight. It is not to be expected, nor, perhaps, desired, that all Shorthorn breeders should revolutionize their ideas, and try and turn their splendid beef cattle into great milk producers, but there is little doubt that it would be a great national gain if some of the younger men would form a new school, shake off the shackles of the show-ring, and go in boldly for the cultivation of dairy points. There is still plenty of material for them to work upon, and a few are already moving in this direction.

As soon as navigation opens, all the pits in Glace Bay collieries, B.C., will be double-shifted, as an output of 15,000 tons per day will then be required to fill the Dominion Coal Company's contracts. A most prosperous season is expected.

FARM.

Successful Sugar-beet Growing in Michigan.

490

W. S. Stevens, Secretary of the Fruit-growers' Association of Grand Rapids, Michigan, a State that has made rapid strides in the beet sugar business, as our readers know, writes :

" In America, as well as in Europe, its promoters have demonstrated that raising sugar beets is valuable and feasible, that it is a success in its very inception, and that encouragement extended in its behalf is one of the best of investments. The farmer requires a diversified crop, so that in seasons of failure in one, he may have success with others. In the raising of sugar beets there is no monopoly, and he will find no lack of a market for all he can produce. It is apparent that the increase in the uses of sugar exceeds the increase in population. The average gain of consumption in the United States has been over 12 per cent., while the exact rate of increase in population is not over 3 per cent. All that seems necessary is to keep in mind the supply and demand, in order to get an intelligent idea of the future consumption of the sweet commodity. There is hardly one of the 79,000,000 inhabitants that does not use sugar to some extent. It's a luxury and a necessity, and as our people are becoming gradually ' better fixed,' there is an increasing tendency towards luxury. This presages a greater increase in this article as we progress. It is beyond computation to know the possible increase in its use. "In answer to the 'Farmer's Advocate's'

question as to the best practice, I will say, first, the physical basis for growing sugar beets is the quality and composition of the soil. Soils generally described as clayey, sandy loam or alluvial, or the black prairie soils, are best. The least favorable is a heavy, sticky clay. In general, a soil that will produce good corn and potatoes is well adapted to the sugar beet ; reasonably level and well-drained preferred. A certain amount of moisture is absolutely necessary.

What Crops to Grow Between Beet Crops .-This question is one that needs careful thought, as the soil plays so important a part. Soils well fertilized with well-rotted manure, one year previous to each crop, or with a commercial animal fertilizer, made up of bone, blood and potash, will produce a good crop of beets for several years in succession. Beets should follow wheat, or some cereal crop, or clover (not a timothy meadow), because the ground will early be available for fall plowing, a prerequisite to a most successful beet culture. This spring plow early and deep -10 to 12 inches-and thoroughly harrow and pulverize soil up to the day of seeding ; and here let me say, the weeder in use to-day is an excellent tool to keep back young growth of weeds.

"Rotation of Crops.-Special attention should be given to the condition of moisture in which the preceding crop leaves the soil. Three samples of rotation are given to guide the grower. "First, a four-year rotation, with 25 per cent.

beets :---(1) Winter wheat, with strong stable rotted manure; (2) beets; (3) summer crop; and (4) clover. Five-year rotation, with 20 per cent. beets

the most sugar. Smaller, long beets, also have the most sugar; grow them fast by cultivation. 'The sugar-bearing portion of the beet decreases toward the center, and in the center of a very large one there is no sweetness, but rather the flesh is salty. In a small beet the saccharine cells extend through the center and pervade the entire beet.

"A Fair Average Crop is 16 tons to the acre, of 18 to 14 per cent. of sugar. As high as 20 tons, with 16 per cent., has been grown here. One grower had 10 acres. Result: 16 tons per acre; 14.2 per cent.; sold for \$84.80; cost \$26; net profit, \$58.80 per acre.

Cultivators .- The ordinary corn cultivator, with narrow teeth, is used almost exclusively after plants are up. Many improved tools are on the market, which must be tried before recommending. Land should be harrowed and smoothed as fast as plowed, and then finished to a fine tilth. The retention of moisture in the upper layer of soil is absolutely essential for best results. One quite common error is the preparation for beets of new land or land a number of vears in sod.

"Purchase of Seed.-The companies all reserve the right to furnish their own imported seed, and the purchase price is deducted from sales on delivery.

"The Sugar Quality varies from '11 to 18 per cent. of sugar.

"The Average Cost of Production varies from \$26 to \$31, including every item of expense. To Plowing (usually subsoiling), \$2.25 illustrate : per acre; harrowing, \$1.00; seed, \$2.50; sowing, 50 cents ; cultivating six times, \$2.50 ; thinning and weeding, \$7.00; pulling and piling, \$2.00; topping, \$5.00; drawing, average two to three miles, \$5.00. Total, \$27.75, a fair aver-

" Delivery .- Beets are delivered until quite late in the fall, companies generally running until long into December and January. It is profitable to haul six miles, and if railroad facilities are ample, then ship. A gain is thus made, owing to the delays in unloading from wagons, when the teams are generally so numerous. Although every facility is offered, farmers sometimes have to wait hours for their turn to unload. Many companies advance \$5.00 per acre after the crop is once under cultivation, which comes oftentimes as quite a blessing. There is no trading stock for sugar ; you cannot as a producer obtain one pound of sugar from a factory

Experience with Pulp.—The pulp of the sugar beet is valuable as a succulent food for cattle, especially so for fattening stock. A herd of 60 head will consume about two tons a day, only requiring a small amount of hay and no grain. Pulp is valued as high as \$3.00 a ton. In many localities it is given to the grower for the drawing; in other localities it is charged for at the rate of \$1.00 a ton. From one Michigan factory, the product goes up into Wisconsin to the stock yards, selling for 60 cents and freightage to be added. At \$1 a ton, it is a valuable and cheap food, demonstrating the need of securing As a fertilizer, there are no authentic this refuse. experiments, but the tops have certainly a value left to be plowed under. In the far West, experiments are being made in producing an article with a pleasant flavor and desirable color. I reFOUNDED 1866

Ventilation of Stables.

An old subscriber, and an appreciative reader of this paper, has asked us to give him a few suggestions as to installing a system of ventilation in a stable 60x100 ft. Owing to the peculiarity of the site the front of the barn must face the north, but on the north side there is a good windbreak of trees. Our reader says he intended to put in tile at the top of the wall. Now, there are several very elaborate schemes of stable ventilation, and lengthy and learned reasons advanced why each should be adopted, but we have tried to discover a plan that is at once simple and easily installed, and yet conforms to all the rules of scientific hygiene. It seems to us considerable confusion in the minds of those most interested in ventilation has been caused by investigators claiming different actions for carbonic acid, the injurious and impure principle of stable atmosphere. Some have claimed that as this impurity is heavier than air, as soon as it is cooled to the average temperature of the stable it sinks to the floor. Others claim that although a heavy gas, it is easily diffusible in the air, and as warm air has a greater capacity for absorbing moisture or other impurities than cool air, and also is lighter. the carbonic acid is carried to the ceiling with the warm vitiated air, and should be removed there. Our experience has led us to agree with the latter contention, and the plans we here outline are in accordance with this theory.

In order to get a clear idea of how a system of ventilation should work, it is well to consider the stable a stove, and the ventilation system the dampers and flues. In a stove the oxygen of the air is utilized in combustion with the fuel, and the products of combustion (smoke, etc.) pass up the chimney. In a stable the oxygen of the air is utilized in the animal's body, and the products of the combustion, though in a slightly different form to smoke, rise to the ceiling, where they should escape. The whole problem then of ventilation lies in securing a good "draft," so to speak, in the stable, and at the same time to avoid cold drafts and keep the stable comfortable.

Considering the stable as a stove, then our object in ventilation will be to get an inlet of fresh air at the bottom and an outlet at the top. The system must be made to draw. To accomplish this, one of two ways should be adopted. First, the air should be introduced through a cowl at some distance from the barn (or some recommend from the top of the barn), and at a height of from fifteen to twenty feet from the ground (sometimes the air is admitted this way without a cowl, simply through a horizontal pipe), conducted through pipes to the passages in front of the cattle, and introduced to them through branch pipes. This system was outlined in our January 7th number.

The other plan is to put U-shaped pipes in the wall, just at the ground level, to introduce the air without giving it a direct course into the of syrup from sugar beets. The syrup is fine, stable. These pipes should be put on all sides of the barn in order to insure fresh air in the stable no matter from which side the wind is blowing. This inlet pipe might be modified by using a tile in the wall near the floor to admit the air, and a casing of some kind on the inside to break the force of the in-current, and cause it to rise. Whatever the system of inlet pipes, the outlet should be as straight as possible, and near the center of the stable. In large barns it would be best to have two or three of these outlets. Close-fitting wooden flues are the best. At the top they should be covered, but open on all sides to give a free draft. In these flues, as near the bottom as possible, have dampers that can be closed when the stable is empty, or practically closed when winds are very high and the air in the stable, contin sequently, changing rapidly. Tile pipes in the wall at the ceiling, though they do good in some cases, are not in the best place, and frequently. permit unhealthy drafts to blow across the stable, unless provided with some ready means of closing them when necessary. No provision need be made for checking the income of fresh air except the dampers in the outlet pipes, for as soon as they are closed the pressure of the air inside the stable becomes greater than that without, and, consequently, ro air is admitted to the stable. One thing to be observed in these ventilating systems is to have all other openings about the stable closed and the flue tight. Everyone is familiar with the effect of an open damper in a stovepipe, and an opening in the outlet pipe of the ventilating system acts similarly. In correspondent's case we would use three outlet pipes. As a sure precaution, plenty of room should be provided in the stable. Passages should be wide, and the ceilings high. Locations play a very important part in ventilation, and it is well to be prepared for unaccountable conditions.

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-(1) Beets, with artificial fertilizer: (2) summer crop; (3) clover; (4) rape seed; and (5) winter crop.

"Six-year rotation, with 50 per cent. beets :-(1) Beets. with well-rotted manure; (2) beets, with artificial fertilizer; (3) barlev: (4) beets. with stable manure; (5) wheat or barley; and (6) clover.

"Best Manure. When and How to Apply, is fairly well covered in preceding answers.

"Best Time, Method and Machine Used in Seeding.-After thoroughly preparing the soil. plant as early as soil will permit, when warmed. in drills. 18 to 22 inches apart, using any of the popular seed drills now on the market. The Planet Jr. is among the best. Use plenty of seed: 15 to 18 pounds to the acre. It is easier to thin than to not have plants enough. Cover the seed with 1 to 11 inches of soil. As soon as beets anrear plainly enough to see four leaves, thinning should commence. A wide hoe in the hands of an energetic farmer will do much. Go through the row, cutting crosswise all plants, except every ten inches, then let girls or hove follow and thin to One Good Healthy Beet Plant. Follow this process with the cultivator, and keep diligently at it until all danger of weeds is over or lack of moisture is shown. Beets planted early will mature early and require less irrigation. The more thoroughly the soil is worked, the greater per cent. of sugar will the crop show.

"The Sugar Content.-The presence of sugar in the heet is due to the chemical changes in certain of the constituents of the roots, which change is effected by the action of the sunshine. Accordincly the process is conducted through the channel of the leaves. The heets well cultivated will have large strong leaves, and, of course, contain tion from it.

gard this as being a grand introduction for future beet-sugar factories. Its use will be limited. no doubt.

" In conclusion, let me say that the industry is well worth attention. The business of beetgrowing resembles horticulture, and demands every attention to detail. The beet is a delicate, highbred plant, and will resent very decidedly any neglect. by a reduction in tonnage, sugar content and purity ; hence the importance of careful selection and preparation of soil, of seeding plentifully, of thinning just at the right time (when four leaves appear), and of thorough cultivation. Retain moisture near surface and work soil to a tilth immediately after plowing. Observe these rules and you can grow beets that will produce results like the following : One acre, \$70.31, lowest in all: 2 acres, \$180.71; 2 acres, \$159.99; 3 acres \$293.98 : 5 acres, \$317.85 ; 10 acres, \$630.91 ; 16 acres, \$1,265.05; 110 acres, \$8,331.05. These are facts as gleaned from a list of growers in Michigan last year.

"With the reputation the Canadian farmer has, there seems no reason for hesitancy. The industry is unattended by speculation, the price is fixed for each tonnage, and it only remains for him to so raise the crop that he will increase that tonnage and get the highest per cent. of sugar. W. S. STEVENS.

" Kent Co., Mich.

Best Value for Money.

Chas. H. Rowe, Lambton Co., Ont. : I am much pleased with your paper. It is a welcome visitor, and the best value for the money that any farm home can get. It should be in every home. I have received a great deal of valuable informa-

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APRIL 7, 1904

THE FARMERS ADVOCATE.

Preparing the Seed-bed.

In the preparation of the seed-bed, we should have in view, first, the needs of the seeds while merminating; and second, the needs of the young plants during the first period of their growth. Seeds, in germinating, require three things: (1) Moisture, to dissolve the plant-food stored up in the seed, and carry it to those parts of the young plant where it is needed for growth ; (2) air, that the young plant may breathe, for breathing is as necessary to plants as to animals; (3) heat, to start and maintain the vital processes. After germination has taken place and the young plant has reached the surface, its great needs are heat and moisture. In preparing the seed-bed, then, our aim should be to meet these needs as far as possible, to so prepare the ground that, no matter what the weather may be, our seed will be properly supplied with moisture, and to leave our ground in such a condition that it will conserve the moisture of the soil for the use of the young plant during the first period of growth.

There is in the soil a movement of water like that of the oil in the wick of a lamp. This movement acts to keep moisture evenly distributed through the soil, and if there should be more water in one part of the soil than in another, a movement will take place from the moist to the dry section, till the amount of water in each part becomes equal. Hence, when the surface layers of soil become dry through evaporation, water will move up from the lower moist layers to equalize the conditions of moisture. This water is in turn evaporated, and more moves up to take its place, and thus, when surface evaporation is taking place, there is a constant movement of water from the lower soil to the upper, and from there out into the air, to be lost. If we are to control conditions of moisture in the soil, it is, first of all, important that we should know how to check this. The movement of which we have been speaking takes place through the pores of the soil, is greatest where these pores are smallest, and may cease altogether when the pores become very large. It is this fact that enables us to control the movement of soil moisture. We may, by stirring the soil, so enlarge the pores that this movement will not take place, and thus, by providing a mulch of loose soil, where the water cannot move, we can keep the moisture of the soil at any depth we please.

The rains of fall, and the pressure of the snow during the winter, act together to compact the land which has been plowed the fall before. The pores are made small and close, and the soil in the spring is in such condition that water may be constantly drawn from the lower layers to the surface, to be lost by evaporation. It is important, since we wish to save all our moisture, that this should be stopped, and for this it is good practice to run over all our land with a harrow as soon as possible, to break the surface and check evaporation. When we come to prepare the land for the seed, we should aim to cultivate and pulverize the land thoroughly, to the depth at which we wish to plant our seed, but no deeper. Then, the seed should be sown with the drill, the shoes of the drill being set so as to go through the loose soil on top, and leave the seed lying on the firm moist soil beneath. In this way lieve the best and most reliable conditions for germination are obtained. The seed, lying on the firm moist land, which has never been disturbed, is sure of a supply of moisture. Over it is a covering of loose, dry earth, which prevents the escape of moisture, allows air to reach the seed, and gives a warm, dry surface for the sun to warm. Seeds planted under these conditions will germinate properly even if no rain should fall, and the young plants will not suffer from drouth. We do not believe in spring plowing, where we can avoid it, nor in cultivating to a depth greater than that at which we intend to plant our seed, because seed planted in ground so prepared finds itself cut off from the soil moisture below by a layer of dry, open soil, and must depend altogether on rain for its moisture. For the same reason we do not believe in broadcasting seed. Where seed is broadcasted it is simply thrown on the surface and mixed up with the loose surface layer. It will germinate all right if it gets rain, but it too depends altogether on the rain. Spring cultivation is of little use, except as a direct preparation for the seed, and the aim should be to give the seed the best conditions for germinating quickly and surely. Cultivate with any implement we choose, to the depth at which we wish to sow the seed, lay the seed on the firm, moist ground beneath with a drill, and we have a seed-bed that will defy drouth, and give reliable germination under almost all conditions.

Where Turkestan Alfalfa Comes From. The following letter from Prof. N. E. Hansen, M.S., a distinguished graduate of the Iowa Agricultural College, now Horticulturist at the South Dakota Agricultural College, throws considerable light on the origin of this hardy variety of alfalfa, and also illustrates one way in which an upto-date department of agriculture may serve the taxpayers who keep it up. It will only be a short time when Manitoba and the N.-W. T. farmers will be growing this valuable forage plant from seed derived from the imported seed, depending also, of course, on the progress made in soil inoculation, and knowledge of conditions suitable to Turkestan alfalfa :

Your inquiry concerning Turkestan alfalfa was laid aside under the stress of numerous horticultural inquiries. The United States Department of Agriculture has published a circular on the first reports of trials of the 18,000 pounds of alfalfa seed which I secured for Honorable James Wilson, Secretary of Agriculture, in Central Asia in 1897-8. Some seed was sent out in too small lots, so it has been difficult to trace them. Enough, however, has been determined to establish the fact of the superior hardiness and drouth resistance of this form of alfalia above the common alfalfa. The Russian botanists call it a distinct form or variety of the common alfalfa, calling it Medicago Sativa Turkestanica. The seed proved so promising that the Department of Agriculture made a second importation two years ago, and it is being given a more thorough trial. Turkestan alfalfa is, as I look upon it, a geographical form of the species, really the same species, but in the course of ages having been adapted to the extreme dry climate east of the Caspian Sea. I secured seed from eight different sources in Central Asia, Western China, and Southern Siberia. In fact, the main object of my preliminary trip of over 2,000 miles in Northern Turkestan, Western China and Southern Siberia was to trace the northern limit of this species, which appeared to be near Kopal, Siberia. Thirteen hundred miles were traversed by wagon, and 700 miles in sleigh, in the endeavor to reach Omsk on the Siberia railway on the way home.

"The trouble at present is that some seedsmen have taken advantage of the close resemblance of Turkestan alfalfa to common alfalfa, and have substituted one for the other. Common alfalfa was brought to Spain, probably from Arabia and vicinity; thence to South America by the Spaniards; thence to California and other parts of the United States. Turkestan alfalfa is from a region much farther eastward than the original home of common alfalfa, and is adapted to a colder or a drier region. It should be borne in mind the eight sources of seed, varying from the cotton belt to 40° below zero F. Of the northern sort only a small lot was obtained, but it ought to do well in the Canadian Northwest. "N. C. HANSEN."

Marketing Farm Produce.

It is in the handling of his products as much as in their production that the skill of the farmer is brought into play. Not only must he find the best market, but he should also prepare his goods in such a way that they satisfy the highest trade where they are sold. It is the taste of the consumer that must regulate the class of goods that will bring the highest prices, and it will always be found easier to cater to an established demand than to try to build up a trade in a class of goods not generally asked for. Appearance and quality go a long way in a good market, and without the former the latter counts for but little. A clean, neat package is always an attraction, and will often sell a line of goods that otherwise would not command a good price. Merchants are guided by the same things as their customers, and regulate their prices according to the price at which they can sell their goods. Take an example from the dressed-poultry industry, which lately has developed so rapidly, and where a demand has been created for a special quality of fowl. Properly fatted chickens shaped in a shaping board will fetch 5c. per pound higher than farm chickens marketed in the ordinary way. The cost of production is but little increased, and really the only hope of profit lies in conforming with the demands of the best market. Again, butter properly made (and why should not everyone be able to make it properly) and put up in attractive prints, with the name of the farm on the wrapper if necessary, will soon make a ready market for itself, and will bring a price far in advance of that ordinarily manufactured and marketed. With the various classes of live stock again the same principle holds good : An animal of superior merit, properly fitted, can always find a good market and bring a paying profit for the producer. Good, clean grain or seed, that is known to be what it is, can always be sold at a good figure. Everything that is raised on the farm to-day can be made to carry a trade mark

just as indelible as are those used in other industries.

It is the skill of the producer that counts, and the goods he produces will easily find markets. The cost is not increased except in so far as a person must think as he works, and the more this is practiced the greater does the pleasure of the work become, and the more interest is taken in the resulting product. It pays to become an expert in whatever you undertake. An expert in the skillful producing and marketing of farm produce in whatever line has as high a price accordingly as specialists in other walks of life. B.

"The Third Power."

We are in receipt of a book entitled, "The Third Power; or Farmers to the Front," by Mr. J. A. Everitt, President of the American Society of Equity of North America. "The Third Power" has evidently been written as an exponent or promoter of the American Society of Equity, which has been instituted with the ostensible object of stimulating farmers to combine for their mutual protection and advancement, and thus elevate the agricultural classes, or the "third power" in the trio of Capital, Labor and Land, to a position from which they may be able to regulate the markets, oppose other trusts and combines, govern transportation rates on railway, etc.. and dictate to governments regarding legislation favorable to agricultural interests. Although equity for farmers is especially demanded, the plan aims at equity for all, the truism being taken as established that "the country cannot prosper unless the farmers prosper, and the farmers cannot prosper without benefiting all other classes." The undertaking which is being attempted by the Society of Equity is truly stupendous, and probably will never be realized.

Wood Ashes and Barn Manure.

Can you tell me through your columns what is the detrimental effect on wood ashes when mixed with barnyard manure; also, if it is possible to get both on the same land this spring without loss in fertilizing material? "GLENGARRY."

Whenever lime or wood ashes are mixed with farmyard manure, some of the ammonia contained in the manure is liberated. If the two are brought into contact with one another in the soil, the ammonia is absorbed and no loss of nitrogen occurs; but if they are mixed before applying to the soil, the ammonia will pass off into the air and nitrogen is lost. This point can be readily proved by filling an ordinary pail with manure mixed with lime or wood ashes. A little while after mixing there will be quite a noticeable smell of ammonia coming from the pail.

If the barnyard manure is plowed down, the ashes can be applied as a top dressing without any danger of loss of fertilizing material. If the manure is applied as a top dressing, it should be thoroughly incorporated with the ground before the ashes are applied.

Average wood ashes contain about 6 to 8 per cent. of potash, 1 to 2 per cent. of phosphoric acid, and about 40 per cent. of lime. They are, therefore, a direct fertilizer, containing a large amount of potash in a form very readily available to plants. In addition to this, the lime improves the physical condition of the soil by binding together sandy soils and making clays more open and friable. It also tends to liberate potash from the insoluble constituents of the soil and bring it into a soluble condition. Wood ashes are thus both a direct and an indirect fertilizer. Leached ashes are poorer in potash, but otherwise act the same as unleached ashes. The crops that are most in need of potash are the legumes and roots. Ashes sown at the rate of 20 to 30 bushels per acre on young clover, or ground being prepared for potatoes, usually give striking results in the increased yield of the crop. If used along with farmyard manure, they should give good returns when applied on mangels. They do not benefit cereal crops, such as wheat or barley, so much as the legumes and roots, and, therefore, should be reserved for these latter crops. As the potash in wood ashes is very soluble, ashes should not be plowed down, but applied as a top dressing, and should be spread evenly over the ground, as too much in one place will destroy vegetation. I strongly advise those farmers who have a pile of wood ashes for use this spring to apply them at the rate of about 25 bushels per acre to young clover, or on the potato ground. In wood ashes the farmer has a manure rich in potash, readily available to the plant. Advantage should be taken of this to apply it to those crops most in need of this particular constituent, and thus secure a maximum return for its use.

H. Hanmer, Brant Co., Ont. : I consider that the "Farmer's Advocate" in its weekly form, with the class of reading matter it contains, makes one of the best if not the best agricultural journal of the day.

R. HARCOURT.

Ontario Agricultural College.

A report from the Essex Co., Ont., district indicates that the fruit trees, particularly peaches and plums, have been considerably injured by the long, severe cold of the past winter, but the real extent of the damage may not prove as serious as now apprehended.

Annual Meeting of New Brunswick Farmers' and Dairymen's Association.

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With President C. F. Rogers in the chair, the twenty-ninth annual meeting of the New Brunswick Farmers' and Dairymen's Association was opened at Fredericton, on Tuesday afternoon, March 22nd, fair audience being present, including many The visit of of the Normal School ladies. Senator Perley from the Northwest to his old Province recalls to mind the fact that just thirty years ago he was fighting, single-handed, the battle of New Brunswick farmers for the re-establishment of the Board of Agriculture, which had been abolished not long before. His bold and fearless agitation against the policy of the Government in which his father held a portfolio, led to the organization of County and Provincial Associations, the chief object of which was the wresting of control in matters agricultural from a commission of "lawyers and such," and the restoration of this control and direction to a board of farmers, who, to use the Senator's phrase, "knew something about it." So the Association gained their point, and held it, too, so long as their champion remained in the Province. The Farmers' "League" then established is the direct predecessor of the great Association which met last week.

D. W. Hamilton, M. A., of Fredericton, read a most instructive and interesting paper on "Bacteria in relation to the Farm," first tracing briefly the origin and growth of scientific knowledge of these minute organisms, and showing that, like the genii of old, some species are kindly and some evilly disposed, the formerhappily for humanity-far outnumbering the latter. Most bacteria are destroyed at 160 degrees F., though spores, like seeds, can stand much higher temperatures than the parent plant. At freezing point they cease to grow, but are not killed. Milk is an ideal food and environment for bacteria, though they exist almost everywhere, those in the surface of fertile soils being excellent examples of the beneficial species. They play an important part in breaking up mineral matter, forming nitrogen compounds and in transforming organic matter into nitrates which the plant can make use of. As the supply of nitrogen, so essential to plant life, is being constantly diminished by the removal of crops, and as it can only be renewed from the soil (the free nitrogen of the air not being available), Mr. Hamilton pointed out how essential is the presence of nitro-bacteria in the soil, and hence how important it is that the soil should have plenty of oxygen which these bacteria require for their rapid increase.

HORSE-BREEDING.

Mr. W. S. Spark, of Canterbury, England, was the speaker of the opening evening, his subject being the draft horse, for a trade in which Canada has great possibilities. Mr. Spark earnestly counselled breeders to decide upon a type and stick to it, whether it be Clyde, Shire, Hackney, Hunter or Thoroughbred; but he predicted great success for a distinctly Canadian type, which might be produced by crossing Clyde and Shire. Combining the good points of both, we should get the ideal in heavy draft horses, one that will pull the greatest load with the least strain on his limbs. Failing this, let the farmers at least agree in districts to breed the same type, so that buyers will be attracted and prices kept up, while the cost of breeding will be reduced by the exchange of stallions. In any case, it is essential to breed from mares free of any hereditary disease, such as roaring, whistling and ringbone, and to use the very best stallion of the desired type, regardless of initial cost. Docking should never be done except on a young colt, and better not at all

such as turnips or silo-corn mixed with cut straw and hay. Be sure the corn is well matured, or never put it into a silo. Here Mr. Donald Innes pointed out that in New Brunswick corn was apt to be immature, but that turnips could be grown with great success. In the discussion on root-growing, which followed, Mr, Robertson, of Nappan, stated that many failures in mangolds were attributed to poor seed, when the sowing was really to blame, and that they would have succeeded admirably in bunches. Mr. Ketchen advised plowing out turnips if the soil is dry enough; otherwise, they must be pulled. The grain feed for May cattle should begin with three or four pounds a day in January, increasing to ten or fourteen pounds at the finish, varying the ration-oats, barley and occasionally peas. This, with ensilage and cut straw, and a noon feed of long hay and roots, should give the best results. Here Mr. Hopkins suggested growing Banner oats and six-rowed barley together; and a member stated that Scotch beans and corn, which in the West had proved a failure, are a great success east of Ottawa. Further points emphasized by Mr. Ketchen were the importance of punctual feeding, comfortable bedding, kind treatment, and everything that tends to keep the animal in good humor and putting on flesh. He has found it better to run steers loose (always dehorned) than tied, provided they have plenty of room.

Mr. Duncan Anderson, of Rugby, Ontario, followed with a brief talk on the early care of calves to be raised and finished by the breeder, who should always have an ideal, and stick to it. He had noticed in many New Brunswick beef herds a strong dash of Jersey—a strange foundation on which to build. Do not mix breeds. Have the cows calve late in the fall or in early winter. Begin on whole milk, then skim milk and dry crushed oats, with pulped roots.

DAIRYING.

On Wednesday afternoon, Mr. Robertson, manager of the Maritime Experimental Farm at Nappan, delivered a most practical address on the dairy cow, which he considered the farmer's mainstay, in good and bad times alike. He endorsed Mr. Anderson's preference for cows coming in in the fall, and for keeping to one strain for the purpose intended-either beef or dairy, but not a mixture. He would feed the calf new milk for not longer than five weeks, lest it learn the habit of fat-making, or "putting the feed on its back," as much a fault in the dairy animal as it is a virtue in the beef steer. Regularity of feeding, comfort and kindly treatment, are even more essential with dairy cattle than with others. The stable should be kept at about 60° in winter, should be well ventilated. and, above all, should be scrupulously clean. Cement floors are quite the best. The animals should be carefully brushed. In answer to a question, Mr. Robertson advised feeding twice a day, leaving the cow undisturbed at noon. Cleanliness is absolutely indispensable. The successful dairyman must be deep enough in the business to have a man about his stables all the time.

Mr. N. S. Dow, of Woodstock, then gave some detailed directions regarding the care of milk for cheese and butter. Cleanliness in the stable is the first requisite, and, if rigidly observed, makes aeration unnecessary. If foul flavors are present, aeration is required to remove them. Milk cans should be covered while on the way to the factory. In no case should skim milk or whey be left standing in the cans. Hand separators he claimed are often abused; the best hand separator is the one which is simple and easy to clean, as it should be washed more than once a day. Do not mix new cream with old till cool.

Mr. Ehrhart, formerly of Cornell, now managing a dairy in New York City, expressed the opinion that New Brunswick had a great future before it in the dairy trade. He instanced the fact that 20,000 quarts of milk are sold daily in New York City at twelve cents a quart, and that one firm sells its entire product, 2,500 quarts a day, at 18 cents, chiefly for infants' use such is the value of purity. Another company just formed will supply condensed milk to belligerents in the Far East. Mr. Ehrhart mentioned the Washington Dairy Department's bulletin, "Facts About Milk," with fifty dairy rules, as a most useful pamphlet. Build the cow-barn, he said, for the cows, not for hay, grain and implements.

in a district, and be planted exclusively, so as to attract buyers. Mr. Vroom illustrated by "pulp-heads" how barrels of apples should be branded, and emphasized the importance of clear, neat stencilling. A general discussion on varieties brought out the fact that McIntosh Red, Blenheim, Baldwin and Baxter are favorably regarded in the St. John Valley. Some exhibits of Baxter (Larne) and Wolf River, though certainly past their best, were remarkably firm for the season.

PURE SEED.

Thursday morning's session was devoted to the question of seed purity and germination. Mr. G. H. Clark, Chief of the Ottawa Seed Division, showed a thorough knowledge of his subject, and, having furnished the audience with samples of seed in light wooden trays, was able to command their intelligent attention throughout. Mr. Clark dwelt upon the importance in seed grain of fidelity to type, and mentioned Banner oats as a variety in which this quality was well known to exist. Samples of Banner and Tartan King oats were compared in respect of the percentage of hull in each, on which the members did not all agree. The importance of this question will be seen from the fact that some short, thick varieties test as high as forty per cent. of hull, while some of the long, slim sorts (particularly black varieties) run under twenty per cent., having thin, papery hulls. It is apparent how much more feed value there is in the latter sort, with its large kernel. Some impurities found in the samples were wild buckwheat, vetches, wild oats and barley. Mr. Clark advised the buying of seed near home, and from those only who make a business of keeping the seed under proper conditions for germination. It should be kept cool, and evaporation of its moisture prevented.

The Seed Division was endeavoring, by means of laboratory tests, to assist farmers to secure pure seed. With the aid of farmers themselves, the bill introduced by the Hon. Mr. Fisher last session will, if passed, result in all seed being properly graded and in No. 1 seed being ninety-per-cent pure and germinable. Already, at least one firm is selling seed of this quality, and another gives (on request) a guarantee, stating the percentage of pure and germinable seed used in filling the order. Mr. Clark hopes that in time Canada will produce her own root seeds, and become independent of Europe.

A member enquiring whether varieties of grain must necessarily "run out" in ten or fifteen years, Mr. Clark stated that, given a good variety and ideal conditions for growing seed, the variety can be improved by selection, and kept up indefinitely, just as can be done with potatoes.

FARM MANAGEMENT.

Duncan Anderson opened the afternoon session with a talk on fertility and rotation of crops. Premising that while inventions and discoveries will change methods in all industries, and even shift the centers of population, the soil will forever remain the source of human food, and the farmer its producer. The speaker went on to show that Canada, exporting last year fifty millions worth of cheese, butter and bacon alone, is and will continue to be essentially a food-producing country. Hence the vital importance to farmers of conserving the fertility of their soil. To do this, commercial fertilizers are not sufficient, as they supply no humus; nor is mere cultivating enough, especially on clay soil, where humus-in the form of barnyard manure or otherwise-is required to arrest the escape of moisture, and to keep the stiff soil open and warm. Mr. Anderson stated that he would apply manure in winter, even on snow, if not more than fifteen inches deep, not on a steep hillside, and not on a low level where water would lie. Some discussion arose here, Mr. Robertson, of Nappan, having found this practice result in soggy ground, delaying spring operations wherever applied. Others had a similar experience where there was backwater in flood time, though no current. Manure should always be spread evenly and fine. Mr. Anderson then went on to emphasize his three cardinal rules for cultivation: 1. Be liberal with surface cultivation, since you cannot make the seed-bed too fine. 2. Keep the fertility near the top, as by top-dressing, for example. 3. Never bring to the surface the cold and hungry subsoil. It was strongly urged that there should never be more than two crops of hay in succession.

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In the discussion on feeding Mr. Spark agreed with the author of Shore Acres, that "Hosses is human beins," and therefore should have variety in their feed—oats, roots, scalded bran and sometimes barley.

Mr. Donald Innes had found barley very useful; Mr. Duncan Anderson feeds no hay the second winter, but oat straw, turnips, oats and roots. Mr. Spark admitted that too much hay was not good, but would not substitute straw entirely.

With the aid of some excellent views Mr. Spark then concluded by explaining the good and bad points of many types of horses as to head, body, position in standing, indications of disease, and so on.

PRODUCING BEEF.

On Wednesday morning Mr. A. P. Ketchen, Assistant Live-stock Commissioner, of Ottawa, discussed the selection and feeding of beef cattle, a subject which deeply interested the audience. He first pointed out that buyers of cattle to finish must have excellent judgment, not only of the animals as offered, but of their chances of development. He then detailed the points of a good animal, such as full, bright eyes, large mouth and nostrils, thickness behind the shoulders, long, well-sprung ribs, soft oily hair and skin, and so on. Two-year-olds, if well grown, are good stock for Great Britain; but if not well grown, are apt to use their feed for growth and not to finish properly. With the aid of a chart Mr. Ketchen explained which parts of the animal bring the highest market price, and should therefore be fully developed. The speaker warned farmers against letting the cattle remain out too long in the fall, when cold and wet are sure to give them a setback, which will take weeks of care and feeding to overcome-a dead loss. Then plenty of cheap and succulent feed is wanted in winter,

FRUIT-GROWING.

The Wednesday evening session was devoted to fruit. Mr. MacKinnon, Chief of the Fruit Division at Ottawa, sketched the work which is being carried on under the Minister's direction, with a view to instructing growers in their profession, in the law applying to it, and in the market conditions which they must meet. He touched upon the subject of co-operation as an aid to the grower in all stages of his work, described the power-spraying to be done by the Government in the Maritime Provinces this season, and concluded by showing the helpful relation which properly drawn-up prize lists for fruit at fall fairs might bear to the industry at large.

Mr. G. H. Vroom, of Middleton, N. S., took as his subject, "The Orchard, from the Ground Up," and gave minute directions for selecting site and trees, for planting, cultivating and caring for them. Mr. Scholey, of Centreville, contributed his experience with one thousand New Brunswick trees planted very close together some thirty years ago, which would have done much better had they had room; and agreed with Mr. MacKinnon that a few varieties should be agreed upon by all growers Mr. Ketchen's Thursday afternoon address was barn construction, including site, materials, ventilation, etc. A summary of this address was given in our January 7th issue, in the report of the Winter Fair at Guelph.

The report of the Nominating Committee was brought in on Thursday morning, and the following officers were elected :

President-B. M. Fawcett, Sackville. Vice-president-N. S. Dow, Woodstock. Recording Secretary-A. G. Dickson, Sackville. Treasurer-Geo. E. Fisher, Chatham. Cor. Secretary-W. W. Hubbard, St. John. The list of County Vice-presidents was named as follows:

Madawaska-P. R. Violette. Victoria-Wm. McPhail. Carleton-Wm. J. Owens. York-C. H. Giles. Sunbury-J. W. Stephenson. Queen's-J. W. Shea. King's-E. L. McIntyre. Albert-S. S. Ryan, M. P. P. Westmoreland-C. F. Alward.

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Kent-R. Lennox. Northumberland-Wm. Murray Gloucester-P. J. Power. Restigouche-J. E. Stewart Charlotte-Rev. J. H. Boyd.

Rev. Mr. Boyd declined to act as Vice-President for Charlotte on the ground that he was not a farmer, and at his request, James Russell, ex-M. P., was named in his place.

Alfalfa.

In your last issue, page 441, the question is asked, "When should alfalfa be cut to make the best hay," and the reply is, "Cut when in early bloom, before the flowers begin to turn brown." A few years ago considerable work was done in our chemical laboratory to determine when alfalfa should be cut to get the maximum amount of digestible organic matter. * The results obtained showed that the largest amount of digestible food material was got by cutting the crop before onethird of the blossoms were out; after that there was a very rapid deterioration in value. The following table shows the amount of digestible matter calculated to yield per acre, at cuttings made at different stages of maturity of three different crops :

			Diges-
	Dry	Diges-	tible
	matter,	tion	matter,
Second crop, 1897-	lbs. co	-efficien	t. lbs.
First cutting, buds formed	3,197	58.6	1,873
Second cutting, blossoms one-			
third out	3,819	56.2	2,146
Third cutting, a little past			
full bloom	3,317	51.8	1,701
First crop, 1898-			
First cutting, buds formed	8,045	58.6	1,784
Second cutting, blossoms one-			
third out	4,201	56.2	2,389
Third cutting, a little past			
bloom	3,894	51.3	1.997
Second crop, 1898-			
First cutting, buds formed	1,899	58.6	1.112
Second cutting, blossoms one-			<i>tu</i>
third out	2,505	56.2	1,407

Third cutting, a little past . 2,214 51.3 1,135 full bloom ..

*Bulletin 111, Ontario Agricultural College, Guelph.

The above figures show clearly that in our work the largest amount of digestible matter was obtained at the time of the second cutting, or when the growing crop was about one-third in blossom. As the different cuttings were made two weeks apart, it is possible that a larger amount of digestible matter would have been obtained a little earlier or a little later than the period mentioned. The results of American experiments indicate that a little earlier would have given better results. It may, therefore, be safely asserted that alfalfa should be cut just after the first blossoms begin to appear, certainly not later than when one-third of the crop is in bloom. Cut at this time, it not only gives better returns in food material, but the roots are less exhausted, and the second growth comes on faster.

Alfalfa makes an excellent soiling crop, as it may be cut at least three times during the season. It is a little difficult to cure as hay, but larger yields can be obtained than with the clovers, and, pound for pound, it contains more digestible protein. In fact, no fodder crop grown on the farm will produce so much digestible matter, with so little drain on the fertilizing constituents of the soil as alfalfa, and no farm on which it can be grown should be without at least a small patch near the barns for supplemental feeding. R. HARCOURT. O. A. College, Guelph.

THE FARMERS ADVOCATE.

Fence-building.

As regularly as the seasons $c_{\mathbb{C}}$, σ round the problem of fencing arises. Molern farming methods are gradually dispensing with a large amount of permanent cross-fencing between fields, but the boundary fences and many others must still be maintained. It is with considerable satisfaction that we see the woven-wire fences of various styles-some ready woven, and others woven on the ground by hand machines -- replacing the old rail or other wooden structures. The fence that is demanded for present-day needs must be absolutely proof against the kinds of stock it is intended to enclose or exclude, durable, neat, and occupy little land. The next question is how shall it be built? Wood is out of the question. Another thing is certain, and that is the barbarous and expensive barb-wire fences should be doomed. Barbed wire cannot be woven, and as constructed in many localities in the past, they required too many posts, too much bottom and top timber. If the Humane Society wish to engage in a crusade that will ensure the lasting gratitude of horses and other stock, and benefit the pockets of the owners at the same time, they will declare war against the barbed-wire fence, nor cease the crusade till it is swept from the land. The fence for the present and the future is the woven steelwire fence, with posts from twenty to forty feet apart (depending on the number of wires to be used, the higher the fence the fewer the posts required), and with as few wooden appendages as o**s**sible. As to the particular style or make of fence, that will depend on the taste and pocket of the person building, and the purposes in view, and from the many excellent kinds now advertised he will have no trouble in making a good selection and an economical one.

In building such fences, the end posts are the all-important fixtures. They must be solid and substantial to begin with, and must be securely anchored in the ground. There are several methods of securing good anchorage. One is to mortise the post and fit in cross pieces, which will project about one and a half feet on each side, upon which a platform can be laid and covered with heavy field stone. From the top of the post a brace is then run to the foot of next post in the line, and from the top of this a heavy double wire brace to the bottom of the end post. The double wire is then twisted taut. Another plan, where the anchor post is not on a corner, is to run the double-wire brace to a large stone in the ground on the opposite side of the post to which the tension of the wire is exerted. This scheme is sometimes worked at gates. The stone is buried midway between the posts, and the wire extended from the top of the second post to the bottom of the gate post, and from there to the stone. Even with this anchorage, however, it is always well to use the wooden braces to the adjoining post. A third plan that is being adopted is to bed the posts in cement concrete, digging a large hole so that there will be a foot or two of concrete all around the post. It should be allowed to "set" thoroughly before stringing the wires, and the top immediately surrounding the post raised enough to shed the water. In every case, the end or gate posts should be large, not less than ten inches in

effective. The post should be thoroughly dry before it is applied. When set, three furrows on either side of the fence should be turned toward it to ensure drainage and eliminate the danger of heaving.

In building a fence, it is always good policy to arrange for as long stretches as possible. longer the stretch the less tension on any particular post, and the more resistant to pressure of snow, water, or impact from stock. In some cases arrangements can be made with a neighbor to increase the stretch without the use of an anchor post at the dividing line between farms.

When deciding upon the wire to use, it is always good policy to attach considerable importance to weight, especially in the uprights, and for fences about yards, pastures or for lanes. The number of wires required will depend upon the use to which the fence is to be put. Where hogs and sheep are not to be enclosed, probably seven or eight wires will be sufficient, if well banked up. On roadsides, nine to twelve strands will be required. Where it is desired to sag the wire in order to cover a depression, spring the wire down and fasten it by a wire brace to a block or stone buried in the ground. A homemade fence, and one that is easily seen by stock, is made by using wooden slats on the coiled string wire strands, about an inch square for uprights between the posts. These, of course, do not last as long as wire, but they are easily replaced.

Poultry-netting about gardens and orchards is now so easily procured that it is remarkable more is not used. Few things are more annoying on the farm than to have hens interfering with the garden operations. This netting is not strong enough to enclose hogs and other stock, but may be tacked on the posts with the other wire.

For cross divisions through the farm, portable fences might be more extensively used, unless for land seeded to permanent pasture. Where the crops are rotated, and the grass and clover given a proper chance to grow, there is no need of fences about each six- or seven-acre field. Grain crops should be seeded to clover, if for no other purpose than to enrich the soil, and this clover should have every opportunity to grow after the grain is cut. The only crop, therefore, that requires fencing is the pasture of grass, rape, or other forage crop. Several varieties of portable fence serve for enclosing stock on the pasture, but all things considered it is doubtful if anything is better than woven wire attached to posts that can be driven into the ground and braced solidly every few rods by a well-set post.

In conclusion, do not aim at simply getting a cheap " structure. Build a good and durable fence, that will give you protection and permanent satisfaction.

Our Christmas Number Brings Him.

Mr. W. A. McKinnon, Chief of the Fruit Division, Department of Agriculture, Ottawa, has received the following from a correspondent in Scot-"After reading your very concise article land : on 'The future of fruit-growing in Canada,' in the Farmer's Advocate,' a copy of which I have lying before me, kindly sent by a friend, it has given me a new stimulus to go out and join with some of the growers beside you. All the facts put down by you in your article are well worth the dving. as I have seen myself, in the sever years' experience I had in the wholesale trade in Glasgow, that the theories you give, i.e., better packing and honest packing, are always sure to Seeing such reports. command a good market. and such glorious views of different parts of the Dominion, it has me quite discontented with the Old Country." There is no doubt that the cir-culation of the Christmas "Farmer's Advocate" has been the means of inducing hundreds of Old Countrymen to improve their condition by coming to the "Canadian Land of Promise."

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Origin of Red Fife.

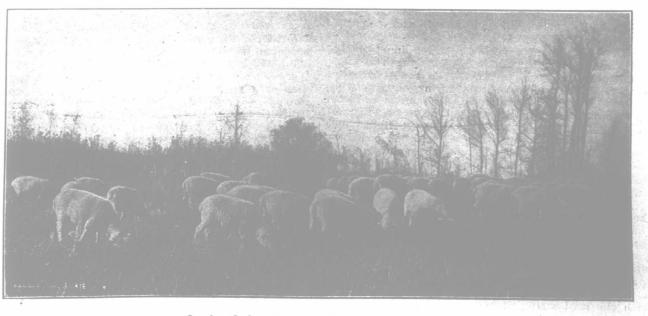
About the year 1842, Mr. David Fife, of the Township of Otonabee, Canada West, now Ontario, procured, through a friend in Glasgow, Scotland, a quantity of wheat which had been obtained from a cargo direct from Dantzic, Prussia. As it came to hand just before spring seed time, and not knowing whether it was a fall or spring variety, Mr. Fife concluded to sow a part of it that spring and wait for the result. It proved to be a fall wheat, as it never ripened except three ears, which grew apparently from a single grain. These were preserved, and although sown the next year under unfavorable circumstances, being quite late and in a shady place, it proved at harvest to be entirely free from rust when all wheat in the neighborhood was badly rusted. The produce of this was carefully preserved, and from it sprung the variety of wheat known over Canada and the Northern States by the different names of Fife, Scotch and Glasgow.

Up-to-date.

Robt. Shortreed, Wellington Co., Ont., says: Please find enclosed \$1.50, yearly subscription for your valuable paper. I think the weekly edition is a great improvement, as all information and reports of the markets are up-to-date.

liameter if possible and sunk four feet in the ground. The size of the other posts is not of so much importance, but the larger they are the more substantial the fence. These also should be anchored at the bottom when set in a valley, and the wire stretched across, which gives it a tendency to raise the post.

In view of the scarcity of wood, some preservative should be used upon the posts. There are several preparations suitable for the purpose. The cheapest and easiest applied are lime, whitewash, and coal tar; the latter, perhaps, being the more



In the Quiet Pastures, Strathcona District.

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DAIKY.

Paraffining Cheese.

To the Editor "Farmer's Advocate":

Sir,-Considerable attention has been drawn to the practice of coating cheese with paraffin wax. largely through the work of the Government cool cheese-curing rooms, where all of the cheese-about 50,000 boxes-have been paraffined during the past season. The objects of coating cheese with paraffin wax are: (1st) It prevents the cheese from moulding, and preserves a clean, attractive appearance; and, (2nd), it almost wholly prevents shrinkage in the cheese when they are kept at temperatures under 60 degrees.

This statement regarding the saving in shrinkage is substantiated by the following figures, which were quoted by Mr. J. A. Ruddick, the Chief of the Dominion Dairy Division, at the dairy conference held in Ottawa recently :

Relative Shrinkage of Cheese made from the Same Milk, Waxed and Unwaxed, and Both Cured at

58 Degrees.

	Waxed.	Unw	axed
	lbs. ozs.	lbs.	OZS.
Green weight, July 25th.		84	2
Weight, August 1st		83	14
After waxing, August 1st	 84 6	00	00
Weight, August 28	th 84 2	82	12
Loss in weight	2	1	6

Retailers in Great Britain have claimed that they should be allowed something in the weight of parafined cheese, alleging that there is more shrinkage when these cheese are cut than there is with unparaffined cheese. In order to get some information on this point, some experiments were conducted last season at the Government Curing Rooms, with the following results :

TEST NO. 1.

Comparative Shrinkage of Paraffined and Unparaffined Cheese after Stripping and Cutting.

			U	n-
Date	Para	fined.	para	fined
Weighed.	lbs.	OZS.	lbs.	OZS.
July 14th	. *79	12	*77	2
August 18th	. 79	4	75	4
August 18th	†78	12	†75	0
August 20th	. 78	8	74	12
Loss in stripping	. 0	8	0	4
Loss in two days after strip-				
ping	0	4	0	4
*Green weight. †After st	rippin	g and	cutting	ç.
TEST NO				
Comparative Shrinkage of Para				fined
Cheese after Stripping	and	Cuttin	g.	

	Une	ese	alter	Strippin	ig an	d Cutt	ing.	
							Ord	ina
					Cool	Cured.	Cu	red
Date					Para	fined	Unpara.	ffine
Weighed					lbs.	OZ8.	lbs.	OZ
October	26th				. 77	6	77	10
October	26th				†76	12	177	4
October	30th				76	3	76	14
Loss in	stripp	oing			0	10	0	6
Loss in	four d	avs			0	9	0	6

THE FARMERS ADVOCATE.

only possible where the cheese are kept at a comparatively low temperature. It would not be practicable to attempt paraffining where the cheese are kept in an ordinarily hot curing-room. Paraffined cheese have come in for some criticism, but so far there has been no real objection offered. Some of the English dealers do not like the idea, while others strongly favor it. It is an innovation, as far as Canadian cheese are concerned, and it is natural that at first there should be some prejudice against it on both sides of the Atlantic. When the wax is properly applied the weight of a cheese should not be increased by more than five ounces, four ounces being about the average.

W. W. MOORE. Chief, Markets Division.

Department of Agriculture,

Ottawa, March 25th, 1904

[Note.-As the season of cheese manufacture is about to reopen in Canada, it would be well if those in the trade would give us some specific statements as to the desirability or otherwise of paraffining. Makers are not desirous of taking a leap in the dark."-Editor.]

CREDIT TO CANADIAN JOURNALISM.

I think you are taking the wisest course in not dipping into party politics in the Farmer's Advocate, as one of your readers suggested. I have taken the Advocate for the last seven years, and I like it better now than ever before. The weekly edition is much appreciated, and the farmers of Canada will no doubt stand by you in your effort to give us a paper that is a credit to Canadian journalism.

If there is one part of the Advocate I enjoy more than any other, it is in reading the selections in the Quiet Hour. I think they are very helpful to anyone.

Wishing the Advocate the success it so well merits, I remain,

Yours truly,

SAMUEL MILLER.

Bruce Co., Ont. March 22, 1904.

Mould on Butter.

Complaints are received from time to time at the Dairy Division, Ottawa, regarding the appearance of mould on the parchment paper linings of enetrated the butter for some distance. It would be a good thing for the creamery owners, as well as for the trade generally, if it were compulsory to have all creameries thoroughly disinfected every spring before operations begin. The spores of mould and other germs which cause bad flavors are destroyed if the work is properly done, and it is a comparatively simple and inexpensive operation, if the following plan is adopted : Wash the whole interior of the creamery, including walls, ceilings, floors, posts, shelving, etc., with a solution of one part bichloride of mercury to one thousand parts of water. Apply with a brush, and scrub well wherever applied. The bichloride of mercury (corrosive sublimate) may be procured in tablet form, of the right strength to make the above solution by adding one tablet to every pint of water used. This substance is a deadly poison, and must be handled with every care and precaution. Formalin may also be used, ei her as a spray or by being allowed to evaporate from a sheet of cotton suspended in the room, when the doors, windows and other openings are tightly closed. It requires about five ounces of pure formalin to disinfect 1,000 cubic feet. As a pre entive of mould on butter, the following practice is highly recommended : Soak the parchment paper linings immediately before using in a saturated brine, to which has been added one mance of pure formalin to three gallons of brine. Place the paper in the boxes without drying. Keep the brine in a special covered vessel. Boil the brine every week and add fresh formalin in the same proportion as at first. This treatment has been found effective in the Government creameries in the Northwest Territories, where there was a great deal of trouble with mould at one time, and sirable qualities.

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has given good satisfaction wherever it has been properly carried out.

Probably much of the mould on butter is due to the infection of the parchment paper, as it lies about the creamery without any protection, and not always in a dry place. The spores do not develop on the dry paper, but as soon as it comes in contact with the butter there is sufficient moisture to encourage the growth of the mould. The parchment paper and empty packages should be kept in a thoroughly dry, clean place. Only the very best pure vegetable parchment paper should be used. Inferior paper encourages the growth of mould, and does not protect the butter. Much of the paper used is too light in weight. A ream of 500 sheets, measuring 50x121 inches, should weigh at least 40 pounds, and the same number of sheets, 38x12; inches, should weigh not less than 30 pounds, with other sizes in proportion.

W. A. CLEMONS.

Selecting a Dairy Bull.

Two correspondents have recently asked the questions, "What are the desirable points of a dairy bull-say a Holstein? Can one judge a young calf correctly by points? How can I secure myself about quality, and be sure to get what I am willing to pay for ?'' It is easier to ask than to answer these queries, and probably no two experienced men would answer them in exactly the same way.

It is much more difficult to judge bulls of the dairy breeds by points than it is those of the beef breeds. In the latter the ideal is a smooth, thick-fleshed, plump form, a body which if deprived of head and legs would nearly form a parallelogram-a four-sided figure, composed of straight lines. In that case it is beef only, and the ability to make the most of it in moderate superfices that we look for, and it is less difficult to make a choice. A bull of any of the dairy breeds, built on that plan, would not be expected to sire deep-milking offspring. A dairy bull, like a dairy cow, should be somewhat spare of flesh, thinner and lighter in thighs, flanks and brisket than the beef bull, yet with well-sprung and deep ribs, a strong loin, smooth shoulders, thinner at the top of the withers than in the beef bull, yet thick through the heart, the foreribs well let down, and the floor of the chest wide, giving ample room for free action of heart and lungs, thus ensuring a strong and vigorous constitution. The neck should be strongly muscled, and the head comparatively short, broad at the muzzle, and broad between the eyes, the head having a strong, masculine appearance, giving promise of prepotency as a sire. The dairy bull, as well as the beef bull, should stand on short, well-set legs, as an indication of a good feeder; his hind quarters should be of good length, and carried out straight to the tail head, and his hooks narrower and smoother than those of the cow. Another very important point is the handling quality of the skin and hair. The skin should be soft and pliable, capable of being grasped by the handful, the hair being soft, fine and furry. This is essential to good feeding and good milking qualities in the female, and the male must have it in order that he may transmit it.

Some of these points, of course, do not show prominently in a very young calf, and it is not butter packages. In some cases it is said to have he is at least six months old, but if he conforms easy to judge of what a calf is going to be until enerally to this description he will fill the bill fairly for a show bull, and if his sire is of the same description and his dam is a deep and persistent milker, whose milk tests a fair percentage of butter-fat, and whose udder is capacious and of good form, with large and well-placed teats, and the dam of the sire is known to have had the same qualifications, the young bull should be a reasonably safe one to breed from with a good prospect of keeping up the desirable type in the herd, and of maintaining a satisfactory milk reoord on the part of the females of his get. We have said nothing of the minor or fancy points of color and shape, or set of horns. If with all the other and more important qualities one can secure these to his liking, well and good, but the more essential points should be looked to first. The color is a secondary point, so long as the color belongs to the breed. A Holstein may be black, white, black and white or white and black in varying proportions, and yet fill the bill of a first-class representative of the breed. A Jersey may be solid black or fawn, or either of these colors, with white marks more or less prominent, and yet be fully up to the standard of the breed. and an Ayrshire may be brown or white, or a mixture of these, and be fully eligible to the highest honors in the dairy or the show-ring, where color, with a competent judge, counts for little if anything, so long as it is admissible under the standard of the breed. There is no standard for shape or setting of horns, and when we know that these are capable of being trained, and in many cases with some breeds are being trained to suit the fashion of the day, there is little use in setting a standard, though we know our preference, and would seek to secure it with all the other de-

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†After stripping and cutting.

Note.-The cheese in test No. 2 were made on May $27 \, \text{th}$, and were therefore five months old when stripped In both tests the two cheese compared were from the same vat of milk.

It will be seen by these tables that there is practically the same shrinkage in both paraffined and unparaffined cheese after they are stripped an I cut in two. Of course, the paraffined cheese shrinks more in the stripping, the difference being four to six ounces, which is simply the weight of wax applied to the cheese.

Not only is there a great saving in shrinkage on parafined cheese stored for any length of time. but the quality is preserved, as the coating of wax prevents the cheese from drying out, and thus assures a waxy, meaty body, such as is required in the English markets. It is also worthy of note that a waxed cheese has a very slight rind. if any at all, whereas a cheese that has not been waxed has a hard, dry rind, which is uneatable.

It has been claimed by some that the same result would be reached by leaving more moisture in the cheese at the time they are made, but experienced cheesemakers point out that this would be impossible, because if the cheese were made with sufficient moisture to allow for the high shrinkage which takes place under ordinary circumstances, the excess of moisture would cause other serious defects in the cheese during the early stages.

The paraffining of cheese has no connection with the cool-curing of cheese, and the two things should not be confused. Of course, paraffining is

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it has been

tter is due r, as it lies ection, and res do not as it comes icient m**ois**ould. The should be Only the uper should growth of er. Much A ream es, should number of t less than on. EMONS.

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lls of the of the beef a smooth, if deprived paralleloof straight the ability superfices t to make ry breeds, ed to sire ll, like a e of flesh, nd brisket and deep hinner at bull, yet well let de, giving nd lungs, stitution l the head zzle, and a strong, repotency the bee s, as an quarters straight wer and ther very of the soft and handful, is is esqualities in order

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APRIL 7, 1904

POULTRY.

Feeding Chickens.

Just before hatching the chicken has absorbed the whole of the yolk of the egg. This is nature's provision in the way of sustenance for the first twenty-four or thirty hours of its existence, and during that period it needs no other food what-To try and cram a newly-hatched chick, ever. say when five or six hours old, with food, is simply to court mischief. Let it gain all the warmth and strength available without any disturbance when nestling under the hen for the first twentyfour hours, and then try it with some food. Even at the end of this time many chicks will hardly ta e a peck, at the food. When the bird is hungry it will eat; nature will force it to do so; but the yolk of the egg already absorbed will, in many cases, not be quite digested for about thirtysix hours after hatching.

Many people are still wedded to the practice of giving their chicks hard-boiled eggs and stale bread-crumbs for the first three or four days of their existence. Such a practice is wholly unneces ary, unless, perhaps, in the case of young turkeys and delicate stock. A little Scotch oatmeal, moistened sometimes with water and sometimes with milk, is a first-rate diet for them from the very first. Too much egg-food linds up the bowels, and, besides, the birds do not care to leave it after they have acquired the taste for it.

Coarsely-ground oatmeal is, undoubtedly, the very best food on which young chickens can be reared. It supplies all their requirements as far as growth is concerned, although after the birds are a few weeks old it is better to replace it to some extent with other ground grains.

Changes of food must be given in order to sustiin a healthy appetite. A little barley meal or corn meal may be given sometimes, and if insects are scarce a little animal food should sometimes be included. After a time some of the smaller grains and seeds should be given, particularly for the last feed at night.

When first hatched, chickens require food every The last feed two hours during the daytime. should be by the aid of a lighted candle or lamp, and the first feed early in the morning. The great thing is to keep the birds eating and digesting what they eat, and there is no fear of them not turning out well. Gradually, as the birds grow older, the number of meals per day should be lessened, until at the age of three months they are getting four meals a day. As they draw nearer maturity, these, again, should be reduced to three. and at maturity two is quite sufficient.

APIARY

Reports from Beekeepers.

In order to make the "Farmer's Advocate' increasingly useful to beekeepers, we have decided to inaugurate a series of enquiries on apiary conditions and honey prospects. In the past beekeepers have been at considerable disadvantage in conducting their operations, particularly in marketing, by not having available reports of the amount of old honey in the country, the condition crude petroleum, kerosene emulsion, kerosene-water of the bees in spring, the prospects of honey-bear- mixture, lime-sulphur-salt wash, lime-sulphur-soda ing crops, and an approximate estimate of the amount of honey harvested. It is our intentionthis season to collect sufficient data under these different heads to indicate to the beekeepers something that will assist them in the management of their apiaries. With this object in view, we have prepared the following questions, which we should life to be answered by every beekeeper to whose notice they come. From these answers will be compiled concise and practical reports of the industry in different parts of the country, and of the whole industry at large :

Combs. Beehive furniture, so far as the bees are concerned, is built of one material-wax. True, the superior animal who rules over beedom has in-

THE FARMERS ADVOCATE.

troduced many fixtures for his own convenience the bees also use gum gathered from outside sources for varnish, putty and glue, but the es ential interior furnishings are of wax.

They are all of one kind, with variations. We (all it comb-a delicate structure of hexagonal cells facing both ways from a wax partition, and separated by thin cell walls of the same material. These cells are used as store tanks for honey, or cradles for the young bees.

The latter, like all other insects, pass through three stages from the egg-larva, chrysalis, and full fledged bee. , The larva, when going into the chrysalis stage, spins its cocoon as usual, and, hatching, leaves it as a thin fibrous lining to the cell. Generations of young bees hatched from the same cells leave the comb dark and tough, until one would scarcely believe that the original wax partitions are still between the brown c coon coverings. But they are.

Commercially, beeswax is a valuable article. It las many uses outside of beekeeping, and while we do not keep bees in Ontario for the wax, it is a by-product well worth considering. At all seasons, combs and bits of comb' are going to the scrap heap. The successful beekeeper is looking after these scraps. They should be broken up fine, and thoroughly soaked and washed with cold water. Then they can be melted and put through a wax press to remove the wax from the mass of cocoons, which, of course, do not melt. The wax cannot be got out without a press of some sort, and manufacturers of these machines would do well to advertise in the "Farmer's Advocate."

GARDEN AND ORCHARD.

Power Spraying Adopted.

Secretary-Treasurer W. D. A. Ross, of the Chatham Fruit-growers' Association, writes that his Association has purchased a power-spraying outfit for the use of the members, and asks that Mr. J. C. Harris, who had charge of the Government sprayer used in the illustration work in the Ingersoll district last year, be sent to start their machine. Mr. Harris recently gave the Chatham growers a talk on spraying, with which they were very much pleased. A good many of the members were only giving the power-spraying project half-hearted support previous to his visit, but now they are all anxious to go ahead with the scheme according to the most improved methods. The Association is also talking of putting up a packing-house and evaporator, but are hesitating on account of the prevalence of San Jose scale, which, though confined to a limited area, is gradually spreading in the district.

San Jose Scale Washes.

With more thorough acquaintance with San Jose scale and the remedies for it, the pest, while serious enough in all truth, has ceased to be feared as threatening ruin to the fruit interest of It can be controlled by any New York State. one of several methods, the main question now being which one to use; for hydrocyanic acid gas, will kill wash and other applications, properly applied, and several of them can be used with safety. According to Bulletin No. 247, of the Experiment Station at Geneva, N.Y., the limesulphur-caustic soda wash, which was extensively tested by the Station in 1903, is nearly as effective as the lime-sulphur-salt wash (and much easier to make), is of considerable value in repressing early spring leaf-cating caterpillars, is quite effective in controlling peach-leaf curl, and probably is a partial preventive of apple scab and some other fungous troubles. It will not, however, replace the Bordeaux-arsenical combination in preventing wormy apples.

A Fruit Marks Bill in New York

If imitation is the sincerest form of flattery, Canada may well take it as a compliment that Senator Hill has lately introduced in the Senate of the State of New York a bill very much like the Dominion Fruit Marks Act. There is an additional clause in the New York bill, requiring packages to be marked with the name of the place where the fruit was grown, but this clause is strongly opposed by the trade, who maintain that a large operator who repacks fruit brought into his storehouse by the carload, and coming from forty or fifty different shippers, could not possibly comply with such stipulations. In regard to the bill, the New York Fruitman's Guide says: "It conflicts with the Interstate Commerce Law, that forbids the passage of an act that hinders commerce between various States. Why Canada's law is a success is because it is a national law, but until such a law is passed in the United States, the merchants in such States in which such a law obtains are at a disadvantage with the mer-W. A. CLEMONS. chants of other States.

EVENTS OF THE WORLD.

The Coreans have formally announced that the Port of Yongampho is to be opened to the trade of the world.

Twenty thousand people attended an indignation meeting in Hyde Park, London, to protest against the employment of Chinese in the Transvaal.

The British Admiralty is arranging for the construction of flat-bottomed gunboats, which are to be put on Chinese rivers for the greater protection of British trade.

Baron Curzon, of Kedleston, Viceroy of India, has been appointed Lord Warden of the Cinque Ports, in succession to the late Marquis of Salis-The office is a sinecure, and is not debury. pendent upon his presence in England.

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Bubonic plague is spreading in the vicinity of Johannesburg, South Africa; 55 whites and 50 natives have already died from the disease. Several cases are also reported from Peru, South America.

Lord Delamere, England, has purchased 100,000 acres of fine farming land in Nairobi, East Africa, for the purpose of forming a settlement. He offers 640 acres free to fifty suitable settlers, and 10,000 acres to be leased at one halfpenny per acre year-

Turkey's preparations for war have extended to Syria, where troops are concentrating at the town of Beyrout. The destination of these troops is not known, but it is suspected that the mobilization is taking place in preparation for the exrected outbreak in the Balkans.

The Governor of the Cameroons, South-west Africa, has telegraphed that the revolt has spread into Nigeria, which is British territory. A British customs house has been attacked. The rebels customs house has been attacked. have been again repulsed by the Germans, with a men killed. The Germans lost

1. Give your name and address.

2. How many colonies of bees did you put away for winter in the fall of 1903, (a) in cellar; (b) outdoors? How many in 1902, (c) in cellar; (d) outdoors?

3. How many colonies had you on April 1st, 1904, (e) from cellar; (f) outdoors? How many in 1903, (g) from cellar; (h) outdoors?

4. Were they weak, average, or strong, (i) April 1st, 1903; (j) April 1st, 1904?

5. About how much honey have you on han1?

6. In what condition are alsike and white clover in your section ?

We request beekeepers to forward concise replies to the foregoing to the Editor of our Apiary Department, Mr. Morley Pettit, of Belmont, Ont., the well-known and successful apiarist, who will corefully compile the reports for publication in these columns. By furnishing him promptly with accurate information he will be able to promote the best interests of beekeepers during the aproaching season.

Better Nursery Stock.

At an orchard meeting held at Queenston, under the auspices of the Ontario Department of Agriculture, the following resolution was enthusiastically and unanimously passed :

' Moved by Wm. Armstrong, and seconded by H. C. Bradley, that in the opinion of this meeting a persistent, united effort should now be made on the part of all fruit-growers' associations to check the annual serious loss sustained by planters on account of the careless root-cutting of nursery stock ; also to secure Dominion legislation that will compel nurserymen to guarantee stock sold to be true to name."

Not in it with the "Farmer's Advocate."

W. T. Sine, Hastings Co., Ont., says : I have been a reader and subscriber of the "Farmer's Advocate " for over ten years, and I find it the lest farmers' paper that I can get, and I have tried a number of them, but they are not in it with the "Farmer's Advocate."

killed and two wounded.

He was chiefly Sir Edwin Arnold is dead. known as the author of the "Light of Asia," poem of great merit, which sets forth the doctrines of the Buddhists. Sir Edwin spent many years in India and Japan. His third and last wife was a Japanese girl, the "O Yoshi San" of one of his poems.

In Edinburgh, recently, there was held an auction sale most interesting to relic hunters. Owing to the death of J. N. Durrant-Stuart, twelfth and last laird of Dalguise, the entire family collection of Stuart and Jacobite heirlooms was disposed of. A harp which once belonged to Mary Queen of Scots was sold for nearly \$5,000, while a lock of "Bonnie Prince Charlie's " hair, and one of his wife's, sold for \$170. His sword went for \$390.

A recent despatch says that the march of the British in Thibet towards Gyangste has begun. When that point is reached, an attempt will again be made to enter into peaceful negotiations with the Thibetans. The country through which the force is passing is said to be barren and desolate, and subject to sudden and extreme changes of temperature, the nights being exceedingly cold, while during the day there is constant danger of suffering from sunstroke.

A despatch received by the London Times from Thuna, states that there has been severe fighting between the British expedition under General Mac-Donald and the Thibetans. The Thibetans lost very heavily, their leaders being among the slain.

EUJI MICRO SAFETY .

Several of the British were wounded. The force has taken the initiative in the voluntary agitation is making the display independent of goods owned by will now proceed directly toward Lhassa, and although the march through the country is proving to be very exhausting, and the troops are suffering much from mountain sickness, they hope to have little more trouble from the natives. The total Thibetan loss is estimated at between 400 and 500 in killed and wounded.

The Japanese Legation, in London, Eng., has received the following official report from Tokio, of the first land battle of the war, which took place on March 28th at Chong-Ju, a town south of the Yalu river, and about fifty miles northwest of Pingyang : "On March 28th a portion of our cavalry and infantry forces occupied Chong-Ju after defeating the enemy. The enemy, who numbered 600 men, retreated in the direction of Wiju. Our casualties were Lieut. Kano and four others killed; Captain Kurokawa and twelve others wounded, of the cavalry force. There were no casualties among our infantry. The dead were left by the enemy on the field, but it is reported that some seven or eight were killed inside the town. These were promptly carried off by the enemy on horseback or by ambulance. The Russians were seen conveying in an ambulance two dead men, apparently officers, and bloodstained bandages were found scattered around. The enemy must have sustained losses at least equal to our own." The Russians, according to their own report, lost three officers wounded, three Cossacks killed and twelve wounded. General Mischtkenko, who commanded them, admits having had to retire from his position, but speaks in the highest terms of the bravery of his Cossacks, and asserts that one squadron of the Japanese was thrown into disorder, although he bears high tribute to the gallantry with which the Japanese held the town. . . . A despatch from Chefoo, dated April 2nd, says that the Russian Consul there has received word that the Cossacks have re-taken Chong-Ju; but this report is received with incredulity. It is hoped, however, that more reliable accounts of the events transpiring in Corea will soon be received, as, according to the war correspondents who have been so long shut up in Tokio, their term of waiting has expired, the date of April 6th having been set for their departure to the front. The Russian Government has also withdrawn the ban on correspondents, and has set April 15th as the day on which they may go forward to join the army.

NOTES AND NEWS.

The New York State Assembly passed a bill appropriating \$1,500,000 for good roads.

The wheat crop of New South Wales was 11,-000,000 bushels above the best previous record.

Marconi, the wireless telegraph inventor, is seriously ill with typhoid fever at Milan, Italy.

"Be what you wish others to become. Let yourself and not your words preach."-Amiel.

A Mississippi cotton planter has left Liverpool with negroes for Sierra Leone, where he will start cotton growing.

The British Columbia Act, which was aimed at the exclusion of Japanese and Chinese laborers, has been disallowed by the Dominion Government.

Some of the people in the flooded districts near

for a consolidated school. At a meeting held in private concerns.

the Township Hall, on March 16th, the question was brought up, and a strong plea in favor of Brandon, Man.; Indian Head, N.-W. T, and Agassiz, the experiment presented by Mr. A. H. Gibbard, B. A., Principal of Stamford High School. After a spirited discussion, a committee was formed to prepare a plan of routes, etc., relative to the es-tablishment of such a school. If the plan is carried forward, Stamford is most certainly destined to be a future point of interest for the Province of Ontario.

Eastern Ontario Dairy School Examinations.

The Kingston Dairy School long course, which opened on January 14th and closed on March 9th, was exceptionally well attended, the school building being taxed beyond its limited capacity. Twenty-two of the students, an unusually large number, wrote on the final examinations, all taking the cheesemaking and six the buttermaking examinations.

The following is the result of the examinations. the total possible number of marks being 600 in the cheese course and 800 in the butter course.

Cheese Course.-G. A. Sheriff, 483; G. H. Taylor, 477; J. H. Wilson, 467; A. A. McDonald, 443; T. J. Coffey, 437; H. H. Coleman, 436; Warren Dool, 432; O. H. Sandwith, 416; Ernest Hogg, 407; W. H. McIntyre, 406; Z. K. Anderson, 402; A. Mathison, 401; J. Robeson, 401; O. Blancher, 380; F. Findlay, 376; E. Leeder, 361; R. J. McDonald, 360.

Butter Course.-J. H. Wilson, 628; A. A. Mc-Donald, 592; H. H. Coleman, 573; F. Findlay, 538; Z. K. Anderson, 500; J. Robeson, 490.

A Credit to Canada.

In the Easter number of the Canadian Magazine, no less than two of its articles appeal especially to the agricultural classes of the great Dominion. One upon Wheat Growing in Canada," by W. Saunders, Director Dominion Experimetal Farms, presents many facts of interest set forth in the "Farmer's Advocate" of March 10th, in regard to new varieties and the immensity of the profitable wheat-growing area of Western Canada, the extent of which is estimated at actually 171,000,000 acres. Of this, only 5,000,000 acres are now under cultivation. The possible production of the whole area, provided that in order to maintain rotation of crops only one-fourth of it be cropped annually with wheat, is estimated at 800,000,000 bushels per year, whereas at present the production of wheat and other grains only amounts to 125,000,000 bushels. Dr. Saunders also states the interesting fact that the wheat grown in the more northern portions of the Territories takes less time to ripen and is of better quality than that of the more southern regions. The future of Canada as a great wheat-growing country is, he considers, full of promise. . writes of "Soil Utilization, with Reference to the Pro-Mr. E. Stewart duction of Trees." "Every acre of land," he says, should be utilized for the production of that variety of crops for which it is best suited," and he goes on to show that in Canada there are vast areas only suitable for raising forest "crops." Waste and unprofitable lands, he urges, should be reclaimed as forest areas; this is necessary to secure regulation of climate, water supply, and soil fertility. be better care of the forests we have, and more in-There should telligence used in harvesting it. . . Other features of the magazine, beside the usual number of attractive short stories, are a plea for more sympathy with childhood, by Jean Blewett, and an article on "Church Art

The branch experimental farms at Nappan, N. S.; B. C., are receiving from Ottawa shipments of imported seeds for experiments in 1904. The sources of supply are now England, France and Germany. Seeds are being sent out for new varieties of grain, flowers and roots.

The Central Canada Exhibition Association will lay out a new judging ring the coming season. It will be at the south-west corner of the grounds, on recently acquired lands. Heretofore, exhibitors have had to lead'animals across the race-track to reach the judgingarena

Aberdeen Pavilion, the attractive main building for the Central Canada Exhibition, needs a new roof. The improvement will likely be made before next fair.

Canadian Steamship Service.

In a recent address before the Canadian Club of Foronto, Mr. Robt. Reford, of Montreal, a member of the Transportation Commission, dealt with the need of a fast Canadian service, not merely on the Atlantic, but on the Pacific, and of a new trans-continental railway to co-operate with it in forming the shortest possible trade route between the West and the East. With regret, as a Montreal business man, he admitted that the Canadian terminus of the fast Atlantic service must be taken away from the St. Lawrence, and he named Halifax as the most available port open all the year round, and easily approachable from the ocean. It is a thousand miles nearer than New York to Great Britain, and if such a port as Galway were chosen for the British terminus, steamers of the proper class could make the ocean voyage in three days, another day sufficing to carry mails and passengers by ferry and train to London and other cities in England and Scotland. The geographical advantage possessed by Canada on the Pacific is, as Mr. Reford shows, equally marked, equally entitled to consideration, and equally worthy of being tested by experiment.

U. S. Duty on Horses.

The United States Circuit Court district of Washington, northern division, recently rendered an important decision in regard to the importation of pure-bred horses from Canada. In October, 1901, Hubert F. Page, a British Columbia stock-breeder, took into the Puget Sound District, U. S., four Percheron stallions invoiced at \$500 each, and six Percheron mares invoiced at \$300. Eight of them were sold, bringing an average price of \$394 each. The United States tariff provides for free entry by American citizens of "any animal specially imported for breeding purposes." The U.S. collector of customs at Port Townsend exacted a duty of 25 per cent. ad valorem. His action was upheld by the Board of General Appraisers. An appeal was then entered in the United States Circuit Court, which took the view that the appellant was entitled to recover the duty paid, and entered judgment reversing the decision of the Board of General Appraisers. The latter have given notice of appeal.

A Good Type Citizen.

An esteemed subscriber writes the "Farmer's Advocate " of the recent decease, at the age of seventy-two years, of Mr. Thos. Henderson, one of the in the Paisley Block, near Guelph. Born in Berwickshire, a little south of that famous farming district in Scotland where tenant farmers pay five pounds an acre rent, of which Prof. Greig, of Aberdeen Agricultural College, remarked to the writer while travelling in that district, "This is supposed to be the best cultivated land in the world." Mr. Henderson no doubt inherited much of what goes to make up a model farmer. In his life work, he very clearly carried out in practice the plan so well outlined by Mr. J. C. Snell to the students attending the short course on live-stock judging at the Ontario Agricultural College in 1902, keeping grade cattle, using pure-bred sires, always keeping his cattle in good, healthy condition, the young things growing well. His sheep were grades that looked almost like pure-breds, and I had heard of Henderson's lambs long before I knew him. Of his care of his horses (general purpose), a good example was illustrated in the "Advocate " a short time ago, where we saw a picture of his son, George, and his horse over thirty years old, and his farm thoroughout was an example of tidiness, without any extravagant show. When he went to town on business, that same consistency of tidiness of dress, without expense, was shown, and in this he came up to the ideal for a farmer recommended by Dr. Mills; while, as a neighbor of fifty years' standing said at his funeral, "I have been his neighbor for fifty years, and could always depend on what he said." He never took office in church or state, and a very near friend says he never knew him to put a dollar into any speculation, but by honest industry and economy, by raising beef, mutton and pork, and some grain for market, he made the money that purchased the two hundred and forty acres of fine land where he lived, besides giving his large family a good start, and has quite a good balance besides. Without knowing it, he was an inspiration and an example it would be well for many of our young and old farmers to follow.

have lost nearly all their live urg. Ont. stock by reason of the recent floods.

Chancellor Burwash, of Victoria University, has published in the Toronto News an urgent appeal for union of the churches.

The Ontario Minister of Education has approved of the institution of a summer school for nature study in Kingston. The Government will assist with a grant.

All the available land sites on the Canadian side at Niagara Falls have been purchased by a syndicate, the Princess Estates Co., whose backing is \$5,000,000 capital. The area, consisting of 2,500 acres, will be laid out partly in a town site, and partly for the erection of factories.

Mr. F. W. Michaels, Parry Sound, Ont., writes the following tribute to the "Farmer's Advocate ": " I find all kinds of valuable information in your paper. The "Advocate" is not like most of the local papers, only skim milk. It is all cream, and I know I will get the worth of many times its cost out of it before the end of the year. I wish you every success."

The third annual free exhibition of the "home industries " of the Province of Quebec has been held in Toronto. The exhibition was held under the auspices of the Women's Art Association of Canada, to whom the revival of these home inductries is mainly due. The exhibit, which consisted of linen and woollen textiles, hand spun, dy d with vegetable dyes, and hand woven, showed ed givance both in taste and quality over that of la tweer.

The Township of Stamford, Welland Co., Ont.,

Carman, which is splendidly illustrated, and is written in simple English, free from the technicalities which so often render descriptions of art unintelligible save to the inner clique of art circles. Altogether, the Easter number of the Canadian Magazine is one of which its publishers may well be proud.

At Canada's Capital.

[From an occasional correspondent.]

The Central Experimental Farm at Ottawa has been sending out grain samples at the rate of one ton a day. Over 17,800 have been supplied, each with a package of seed sufficient to sow one-tenth of an acre. Director William Saunders says the Canadian farmers are taking more and more interest every year in these grain distributions.

The St. Louis Exposition staff, which has been very large during the last month, has almost completed the preparations for the final shipment of exhibits to St. Louis. For some time, a car a day has been sent forward, containing samples of farm, forest, mine and factory wealth of the Dominion. Mr. W. H. Hay has been in St. Louis two weeks arranging goods that have already reached their destination. He will be joined shortly by Commissioner Wm. Hutchison, Mr. R. L. Broadbent and other officers from Ottawa. A departure has been made from past methods of preparing for outside exhibitions. All the structural work used in St. Louis for displaying goods was built in Ottawa to be shipped in sections, and of such a character as may be used on future occasions. There are some novel devices. A large safe with a glass door will protect the gold exhibits of the Yukon. There is a rustic stairway and bridge containing all the known varieties of Canadian woods. This structure will be substantial enough to support traffic. The total shipments will number twenty carloads. The Government

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THE FARMERS ADVOCATE.

MARKETS.

APRIL 7, 1904

The unexpected is continually happening in market circles. At the outbreak of the Russo-Japanese war, it was expected wheat shipments from Russian ports to Britain would cease, and, as a consequence, the price of wheat would rise. On this assumption, the speculative market soared, but Russian shipments still continue larger than ever, and the inflated speculative prices consequently reduced. At present conditions are more normal than for some weeks past, but British prices remain firm, with a tendency to rise

Trade in live stock is quite nominal. Export cattle are not in great demand. British markets are being well supplied by Argentine frozen meat and by American packers. It is reported in some quarters that some of the Chicago dealers are making strong attempts to capture more of the English trade, and that as a consequence American beef can be bought in London and Liverpool for the same price that is paid in Chicago. Some export cattle are bought on the Toronto market to fill space contracted for on the boats. Hogs are not rising very rapidly, but they are not likely to go any lower. There are some things in connection with the hog trade that are difficult to be understood, and one of these is, why should there be from seventy-five cents to one dollar per cwt. difference between Toronto and Montreal quotations. On the Toronto market the following quotations rule :

Cattle .- Exporters-Best loads of exporters, \$4.60 to \$4.90 per cwt.

Export Bulls-Choice quality bulls, \$3.50 to \$3.75 per cwt.

Export Cows-\$3.50 to \$3.75 per cwt.

Butchers' Cattle-Choice picked lots of butchers', 1,000 to 1,250 lbs. each, equal in quality to best exporters, \$4.40 to \$4.60; good, \$4 to \$4.30; fair to good, \$3.60 to \$3.83; common, \$3.25 to \$3.50; rough to inferior, \$8; canners, \$2.50 to \$2.75.

Feeders-Steers of good quality, 1,050 to 1,150 lbs. each, \$3.75 to \$4.121.

Stockers-One-year to two-year-old steers, \$3 to \$3.50; off-colors and of poor breeding quality, same weights, \$2.50 to \$3.

Milch Cows-Milch cows and springers, \$30 to \$50. Calves, \$2 to \$12 each, or from \$4.50 to \$6 per cwt.

Sheep, \$3.75 per cwt. for ewes and bucks \$3 to rolls, 16c. to 17c.; creamery, 18c. to 18tc. \$3.50.

Yearling Lambs-Grain-fed, choice ewes and wethers for export, \$5.60 to \$6.10; barnyard lambs, \$4.50 to \$5.50.

Spring Lambs-Good spring lambs, \$5 to \$8 each. Hogs-Packers quote \$4.50 for best bacon hogs, but it is understood in the trade that \$4.80 to \$4-90 is being paid for straight loads, fed and watered.

GRAIN AND PRODUCE.

Toronto Wholesale Prices.

Prices are steady here. No changes are to be noted in local grain quotations.

Wheat-Oatario-Red, white and mixed, 93c. for milling; spring, 88c., for No. 1, east; goose is quiet at 80c. for No. 2, east. Manitoba-Steady and unchanged; No. 1 hard, \$1.03; No. 1 northern, \$1.02; No. 2, 98c.; No. 3, 94c., on track, lake ports. Milling-in-transit price for each grade is six cents more.

Corn-Canadian is steady at 39c. for yellow, and 38%c. for mixed, cars west. American, No. 2 yellow, 54c.; No. 3 mixed, 52 c., in car lots on the track Toronto.

Buckwheat-No. 2, 50c. to 51c., low freights, 49c.

to 50c. middle, and 48c. to 49c. high freights. Seeds-The local movement continues light. Toronto

dealers quote \$5.25 to \$5.75 for red clover, and \$6 to \$6.35 for extra choice; \$3 to \$4.25 for ordinary alsike, and \$5 to \$5.25 for choice lots; \$1.15 to \$1.50 for machine-thrashed timothy, and \$1.15 to \$2 for flail-thrashed.

Dressed Hogs-Car lots, on track here, are quoted at \$6.25 per cwt.

Baled Hay-There is now about enough hay coming forward to supply the demand, at \$9.50 per ton for car lots on track here.

Baled straw, \$5.50 per ton for car lots on track. Butter-Receipts of all kinds continue large.

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Creamery, prints	20c.	to	22c.	
oreamery, solids	100	+ -	20-	
Dairy, pound rolls, choice	15c.	to	16c.	
L'any, large rolls	140	+ ~	10-	
Dany, tubs, good to choice	150	to	160	
Dany, medium	130	+0	110	
Dairy, poor	10c.	to	12c.	
Cheese, 11c. for twins, and 10 tc. f	to 11	c. fo	or large	э.
Eggs, 22c. per dozen.				
Detet				

Potatoes-Continue to offer freely. Cars on the track here are quoted at 75c.; potatoes dut of store, 85c. to 90c.

Poultry-15c. to 16c. for choice chickens; 9c. to 11c. for scalded stock; 7c. to 8c. for old fowl; and 13c. to 14c. for turkey gobblers.

Montreal Wholesale Prices.

Grain-Peas, 66c., east; oats, 33c. to 33%c. for No. 2, low freights; 88 c. for No. 2, in store here; No. 3, 36 tc.

Flour-Manitoba patents, \$5.40; seconds, \$5.10; strong bakers', \$4.60; Ontario straight rollers, \$4.60 to \$4.75, in bags \$2.20 to \$2.80; winter wheat patents, \$4.75; extras, \$2.

Mill Feed-Ontario bran, in bulk, \$20 to \$20.50; shorts, \$21; Manitoba bran, in bags, \$19; shorts, \$21.

Beans-Choice primes, \$1.45 per bush.; \$1.40 in car lots.

Provisions-Fresh-killed abattoir hogs, \$7 to \$7.50; country-dressed hogs, \$7; live hogs, \$5.50. Eggs-New-laid, 24c.

Butter-Winter creamery, 19 tc. to 20c.; new-made, 20 to 21c.; full grass, fall makes, 18 tc. to 21 tc., according to quality; western dairy, 15c. to 15 c.;

Retail prices, Toronto street market : 881 Barley, bush. 471 to 48 Beans, bush. 1.35 Beans, hand-picked 1.65 Rye, bush. 58 Peas, bush. 66 to 681 Buckwheat, bush. 471 to 484 Oats, bush. 401 to 41 Alsike, No. 1 4.80 to 5.25 Alsike, good, No. 2 4.00 to 4.40 Alsike, fancy 5.75 to 6.00 Red, choice 5.50 to 5.80 Red, fancy 6.00 to 6.20 Red, good, No. 2 5.00 to 5.40 Timothy seed' 1.00 to 1.50 Hay, per ton 8.50 to 18.50 Straw, sheaf, per ton11.00 Don ton Straw loose

Horse Market.

During the past week the trade has been unusually brisk for work horses. On Tuesday, one hundred horses were sold at the Repository, Toronto. Bidding was brisk and prices were fair, several of the choice ones changing hands after the sale, at a good advance to the purchaser. The sale of sixty lumber horses on Wednesday was well attended, and prices ranging from \$35 to \$130. The sale of Clydesdale fillies from Glasgow on the same day was successful, the prices ranging from \$155 to \$330, averaging \$230.

The following is Walter Harland Smith's weekly report of prevailing prices :

Single roadsters, 15 to 16 hands......\$135 to \$200 Single cobs and carriage horses, 15 to

16.1 hands 150 to 225 Matched pairs and carriage horses, 15 to

General-purpose and express horses, 1,200

to 1,350 lbs. 140 to 200 Draft horses, 1,350 to 1,750 lbs..... 145 to 240 Serviceable second-hand drivers 60 to 105 All the sales were well attended.

Chicago Markets.

Chicago.-Cattle-Steady; good to prime steers, \$5.25 to \$5.80; nominal; poor to medium, \$3.50 to \$5; stockers and feeders, \$2.50 to \$4.25; Texasfed steers, \$4 to \$4.60. Hogs-Mixed and butchers', \$5.20 to \$5.40; good to choice, heavy, \$5.80 to \$5.40; light, \$2.10 to \$5.30. Sheep and lambs-Good to choice wethers, \$4.75 to \$5.40; fair to choice, mixed, \$3.50 to \$4.80; Western sheep, \$4.50 to \$5.40; native lambs, \$4.50 to \$5.90.

Buffalo Markets.

East Buffalo.-Steady, prime steers, \$5.25 to \$6.50; shipping, \$4.75 to \$5.12; butchers', \$4.25 to \$5.10. Veals, \$5.50 to \$7.75. Hogs-Heavy and mixed, \$5.60 to \$5.65; Yorkers, \$5.50 to \$5.60. Sheep and Lambs-Lambs, \$5 to \$5.90; yearlings, \$5.50 to \$5.60; wethers, \$5.25 to \$5.40; ewes, \$4.75 to \$5; sheep, mixed, \$3.25 to \$5.15.

Montreal Markets.

Montreal.-Cattle-Prime beeves, 4%c. to 5c.; good to medium, about 44c.; ordinary mediums, 84c. to 4c.; common stock, 2%c. to 3%c. per pound. Sheep, 34c. to 44c. per pound; spring lambs, \$3 to \$5 each. Fat hogs are higher; good lots sold at 51c. to near 5₁c. per pound.

British Markets.

London .- Canadian cattle are quoted at from 91c. to 10 to . per lb.; refrigerator beef is 7 to 8c. per lb.; sheep steady.

Coming Events.

Toronto Horse Show, April 22nd to 30th. Montreal Spring Horse Show, May 11th to 14th. Dominion Exposition, Winnipeg, July 25th to August

Sherbrooke FairAug. 27 to Sept. 3 Industrial Exhibition, TorontoAug. 29 to Sept. 10 Central Canada ExhibitionSept. 16 to Sept. 24

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Oats-No. 1 white are quoted at 32c., low freights, 311c. middle freights, and 301c. high freights; No. 2 white, ic. less.

Barley-Market is dull, but steady ; No. 2, 44c., middle freights; No. 3 extra, 42c., middle freights; and No. 3, 40c., east or middle.

Rye-No. 2, 60c., low, middle or high freights. Peas are quiet; No. 2, 65c. to 66c., any freights.

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por von	0.00			
Potatoes, per bag	80	to	90	
Apples, per bbl	1.25	to	2.50	
Spring chickens, per lb	14	to	16	
Old fowl, per lb	9	to	11	
Turkeys, per lb.	20	to	22	
Geese, per lb.	12			
Butter, pound rolls	20	to	25	
Eggs, new-laid	25	to	28	
Dressed hogs, cwt.	6.50	to	7.25	

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At a cost of \$130,000 each ten sets of Dickens' works are being prepared by a Boston Publishing House. They are being printed on rare parchment, illustrated by French and Italian artists, and are to have covers decorated by solid gold. They are destined for J. Pierpont Morgan, the Duke of Westminster, and ten other wealthy men.

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"I wonder if the sap is stirring yet, If wintry birds are dreaming of a mate, If frozen snowdrops feel as yet the sun, And crocus fires are kindling one by one?

Sing, Robin, sing !

I still am sore in doubt concerning spring." -Rossetti.

A FAIR BARBARIAN.

BY FRANCIS HOLGSON BURNEIT.

CHAPTER XX.-Continued.

"I must admit," he replied, "that they don't. In the first place, you kncw, they haven't any; and, in the second, I am under the impression that Lady Beauchamp — their mamma, you know — wculdn't permit it if they had."

"Wouldn't permit it !" said Octavia. "I suppose they always do as she tells them ?"

He smiled a little.

"They would be very courageous young women if they didn't," he remarked.

"What would she do if they tried it?" she inquired. "She couldn't beat them."

"They will never try it," he answered dryly. "And though I have never seen her beat them, or heard their lamentations under chastisement, I should not like to say that Lady Beauchamp could not do anything. She is a very determined person — for a gentlewoman." Octavia laughed.

"You are joking," she said.

"Lady Beauchamp is a serious subject for jokes," he responded. "My cousins think so, at least."

"I wonder if she is as bad as Lady Theobald," Octavia reflected aloud. "She says I have no right to wear diamonds at all until I am married. But I don't mind Lady Theobald," she added, as a cheerful afterthought. "I am not fond enough of her to care about what she says." "Are you fond of anyone?" Barold inquired, speaking with a languid air, but at the same time glancing at her with some slight interest from under his eyelids. There was a hint of appeal in her or Jones, or even Robinson, she could voice, which rather pleased him; but he had no intention of relenting at once. "I confess I am at a loss to know why you laughed," he said. or Jones, or even Robinson, she could not have appeared to regard them as more entirely natural. When — he had deigned to make a more than usually

"Are you," she asked, "really?" letting her eyes rest upon him anxiously for a moment. Then she actually give vent to a little sigh. "We look at things so differently, that's it," she said. "I suppose it is," he responded, still chillingly.

In spite of this, she suddenly assumed a comparatively cheerful aspect. A happy thought occurred to her.

"Lucia would beg your pardon," she said. "I am learning good manners from Lucia. Suppose I beg your pardon."

"It is quite unnecessary," he replied. "Lucia wouldn't think so," she said. "And wby shouldn't I be as well-behaved as Lucia? I beg your pardon."

He fett rather atsurd, and yet somewhat mollified. She had a way of looking at him, sometimes, when she had been unpleasant, which rather soothed him. In fact, he had found of late, a little to his private annoyance, that it was very easy for her either to soothe or disturb him.

And now, just as Octavia had settled down into one of the prettiest and least difficult of her moods, there came a knock at the front door, which, being answered by Mary Anne, was found to announce the curate of St. James.

Enter, consequently, the Rev. Arthur Poppleton, — blushing, a trifle timorous perhaps, but happy beyond measure to find himself in Miss Belinda's parlor again, with Miss Belinda's niece.

Perhaps the least possible shade of his joyousness died out when he caught sight of Mr. Francis Barold, and certainly Mr. Francis Barold was not at all delighted to see him.

"What does the fellow want?" that gentleman was saying inwardly. "What does he come simpering and turning pink here for? Why doesn't he go and see some of his old women, and read tracts to them? That's his business."

ctavia's manner toward her visitor formed a fresh grievance for Barold. She treated the curate very well indeed. She seemed glad to see him, she was wholly at her ease with him, she made no trying remarks to him, she never stopped to fix her eyes upon him in that inexplicable style, and she did not laugh when there seemed nothing to laugh at. She was so gay and good-humored that the Rev. Arthur Poppleton beamed and flourished under her treatment, and forgot to change color, and even ventured to talk a good deal, and make divers quite presentable little jokes.

or Jones, or even Schinson, she could not have appeared to regard them as more entirely natural. When — he had gone so far, once or twice — he had deigned to make a more than usually agreeable speech to her, it was received with none of that charming sensitive tremor to which he was accustomed. Octavia neither blushed nor dropped her eyes.

It did not add to Barold's satisfaction to find her as cheerful and ready to be amused by a mild little curate, who blushed and stammered, and was neither brilliant, graceful nor distinguished. Could not Octavia see the wide difference between the two?

Regarding the matter in this light, and watching Octavia as she encouraged her visitor, and laughed at his jokes, and never once tripped him up by asking him a startling question, did not, as already has been said, improve Mr. Francis Barold's temper; and by the time his visit was over, he had lapsed into his coldest and most haughty manner. As soon as Miss Belinda entered, and engaged Mr. Poppleton for a moment, he rose, and crossed the little room to Octavia's side.

" I must bid you good-afternoon," he said.

Octavia did not rise.

"Sit down a minute, while aunt Belinda is talking about red-flannel nightcaps and lumbago," she said. "I wanted to ask you something. By the way, what is lumbago?"

"Is that what you wished to ask me?" he inquired stifly.

"No. I just thought of that. Have you ever had it? and what is it like? All the old people in Slowbridge have it, and they tell you all about it when you go to see them. Aunt Belinda says so. What I wanted to ask you was different "-

"Possibly Miss Bassett might be able to tell you," he remarked.

"About the lumbago? Well, perhaps she might. I'll ask her. Do you think it bad taste in me to wear diamonds?" She said this with the most delightful

Travelling Notes.

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(By Mollie's Cousin Eleanor.) To give Molly a rest this week, I am going to write for her a few of my Italian impressions. Having spent three weeks here in Florence, we are beginning to find our way about, and, so far, have escaped being run over by the wild Italian bicyclists and still wilder drivers. They seem to have no regard for human life, and I believe it is a fact if you are so unfortunate as to be run over you are subjected to a fine. We have had a glorious time here amid our wonderful historic surroundings, and we have been greatly favored by fine weather. Four wet days out of three weeks is not a bad record. The remaining have been beautifully sunny, and if the winds from the snowy Appenines have blown cold, besides the sheltering Arno a warm spot could always be found. The first week we spent very quietly, glad to bask in the glorious sunshine after the cold of Venice. Pleasant outings to the many charming surroundings occupied our afternoons. Once we took the electric car to Fiesole-a stiff climb, and very circuitous it was, but we were surprised at the speed with which we travelled. All the way up, most lovely views of the town, with the winding Arno, and behind the background of blue hills, greeted us, while around us in wild exuberance flourished olive groves and hedges of beautiful roses. At the summit of the hill on which Fiesole is situated is an old Dominican monastery. Here it was Fra Angelico, the wonderful angel painter, spent many of his early years, breathing in, among such sublime heights, the spirit of beauty and solemnity. Some histories this old town could tell, for it still has the remnants of a Roman amphitheatre, and hardly a famous Florentine but has been connected with it, be he priest, poet or statesman. On another occasion, we visited the Certosa Monastery, some three or four miles from Florence. It, again, had an elevated positition, commanding extensive, lovely views on all sides. If the monks shut themselves off from vanities of the world, they did not exclude themselves from nature. The Certosa Monastery is now a kind of public museum, though it still tains seventeen monks, who are remain there so long as they live. It was one of these white-robed priests who showed us over-a big, fine-looking man he was, too. We passed through the beautiful Greek chapel, with its fine paintings by Beuvennti and Cigoli, and in its crypt and side chapel saw some magnificent tombs in marble, carved by Donatello. One of these was erected to a knight, and he was depicted in marble, with all the details of his armour most magnificently chiselled. The sacristy walls and doors were wonderfully carved in a mixture of olive and walnut wood. If we went easily the first week, we have made up for our leisure during the last ten days. Galleries, palaces and churches have followed one on the heels of the other. Florence, if it possesses a great many beggars, poor and otherwise, is very rich in art treasures, and what great men it has produced, and how badly it has

"Lucia says I am," she returned, with the calmness of a young person who wished to regard the matter from an unembarrassed point of view. "Lucia says I am affectionate."

"Ah!" deliberately. "Are you?" She turned and looked at him serenely.

"Should you think so?" she asked. This was making such a personal matter of the question, that he did not exactly enjoy it. It was certainly not "good form" to pull a man up in such cool style.

"Really," he replied, " $I \to ah \mapsto have had no opportunity of judging."$

He had not the slightest intention of heing amusing, but to his infinite disgust he discovered as soon as he spoke that she was amused. She laughed outright, and evidently only checked herself because he looked so furious. In consideration for his feelings she assumed an air of mild but preternatural seriousness. "No," she remarked, "that is true:

you haven't, of course."

He was silent. He did not enjoy being numbers at all, and he made no pretence of appearing to submit to the indignity calmity

She lent forward a little

"Ah!" she exclaimed, "you are mad again -- 1 mean, you are vexed. I am always vexing you," "I should like to know," thought Barold, growing sulkier as the others grew merrier, — "I should like to know what she finds so interesting in him, and why she chooses to treat him better than she treats me; for she certainly does treat him better."

It was hardly fair, however, that he should complain ; for, at times, he was treated extremely well, and his intimacy with Octavia progressed quite rapidly. Perhaps, if the truth were told, it was always himself who was the first means of checking it, by some suddenly prudent instinct which led him to feel that perhaps he was in rather a delicate position, and had better not indulge in too much of a good thing. He had not been an eligible and unimpeachable desirable parti for ten years without acquiring some of that discretion which is said to be the better part of valor. The matterof-fact air with which Octavia accepted his attentions caused him to pull himself up sometimes. If he had been Brown,

seriousness, fixing her eyes upon him with her very prettiest look of candid appeal, as if it were the most natural thing in the world that she should apply to him for information. He felt himself faltering again. How white that bit of forehead was! How soft that blonde, waving fringe of hair! What a lovely shape her eyes were, and how large and clear as she raised them!

"Why do you ask me?" he inquired. "Because I think you are an unprejudiced person. Lady Theobald is not. I have confidence in you. Tell me." There was a slight pause.

"Really," he said, after it, "I can scarcely believe that my opinion can be of any value in your eyes. I am — can only tell you that it is hardly customary in — an — in England for young people to wear a profusion of ornament." "I wonder if I wear a profusion."

"You don't need any," he condescended. "You are too young, and all that sort of thing."

She glanced down at her slim, unringed hands for a moment, her expression quite thoughtful.

"Lucia and I almost quarrelled the other day," she said — "at least, I almost quarrelled. It isn't so nice to be told of things, after all. I must say I don't like it as much as I thought I should."

He kept his seat longer than he had intended; and when he rose to go, the Rev. Arthur Poppleton was shaking hands with Miss Belinda, and so it fell out that they left the house together.

(To be continued.)

APRIL 7, 1904

THE FARMERS ADVOCALE.

prisoned; vanarola hanged, then burnt; and well indeed. The air cells, even, are not bird the little swift now seems after we Michael Angelo so buffeted that he sought refuge, well nigh heartbroken, in Rome, from which town he never practically with its whole body. One Friends. made an attempt to return. The galleries Uffizi and Pitti, the latter being in the royal palace where the King of Italy resides when in Florence, contain a splendid collection of paintings and sculptures, gathered from all the European nations, but the Italian school largely predominates-Madonnas, good, bad and indifferent; Annunciations and Assumptions abound ; while St. Sebastian, with and without arrows, is a wonderfully common theme.

ELEANOR. (To be continued.)

Birds of the Air.

The spring home-coming of the birds is Many a feathered traveller very near. will have already arrived from the South and will be looking about for a mate with whom to settle down to housekeeping. Bird students everywhere are eager to welcome the new arrivals; but of the boy and girl bird-lovers who have gone no further in study than to recognize the characteristic song-notes and the feather markings which fix the little singers in their class of musicians and identify the species, do not understand the wonderful construction of those dainty bodies. How does a bird's song-throbbing throat, for instance, differ from the human throat? Is its music-box that larynx which in our throats is used for speaking and singing ? Do the birds breathe exactly as we do? Travelling on the wing throughout their uplifted lives, they are more truly creatures of the air than you imagine.

Many-not all-birds actually have their bones filled with air. There is no time like the present, the wonderful spring of the year, for telling you something of the structure of the birds that you are so soon to see flitting before your eyes. What are the living, breathing bones of that marvellous little skeleton under its soft feathers, and how are the voicetones produced ?

Not every bird that flies has hollow bones by which it takes in air. The swallow, the marten, the snipe, the canary, the wood-wren, the willow-wren, the glossy-starling, the spotted fly-catcher, the black-headed bunting-have no air in their bones. Some of the waterbirds have their smaller bones filled with marrow, like ours, the upper part of the limbs being hollow, with an open end for the air to enter. The ostrich, and some other birds which, as you know, do not fly, have, nevertheless, all their principal bones so made that they fill told me of her city home, and I, in my with air. The owl's wise-looking head turn, told them of my own Canadian has a great many air cells in the bones home; of its large extent of territory, the brain. above

treated them ! Galileo was im- meet at the neck to form the "wish- swift, is supposed to have air in every Some" that young people know very bone of its skeleton. How spirit-like a limited to the bones. The muscles may once understand that in body he really the most delightful day they had ever have them, and the bird then breathes is a "triffe light as air."-[Our Animalwell-known bird in particular, the



PRIZE ESSAY-CLASS II. A Day on a Canadian Farm.

It was a lovely day in June, and Father Time's eldest daughter, Summer, had clothed the earth in all its beauty. Every leaf was unfolded, and the woods and fields were sweet with the perfume of the many flowers which were in bloom, and everything around my country home was in perfect peace and harmony. Two of my city cousins, who names were Dorothy and Theodore, had come to make a visit at our home with their father, and had never been upon a Canadian farm before. I was to lay aside all work and study, and devote my whole attention to my cousins that their visit might be a happy one. As soon as our breakfast hour was over, we started on our ramble. We at first visited the poultry-yard, and then went and saw the horses, pigs and cattle, with which the children were greatly delighted. Then we wandered up the lane, across the sparkling brook, gathering flowers on our way, and on the hillside we stopped to rest, and watched the lambs jump and play while the mother sheep fed near by. We went on to the edge of the wood, where many flowers were growing underneath the maple trees, which were laden with a thick foliage of green leaves, but as it was nearing noon, we wended our steps towards our large brick farmhouse. As we sat around the dinner-table, we were greatly amused when little Theodore asked mother if the hens laid eggs on Sunday, and she smilingly replied : "Hens have very little regard for the Sabbath." As soon as our dinner was over, it being a warm afternoon, we went out into the hammock under the large maple trees, and, looking into the west, from there we could see Lake Massawippi, with a range of mountains in the background, which makes one of the most picturesque landscapes in the eastern townships. After admiring this beautiful scenery for some time, we girls then began to make wreaths of maple leaves, which Theodore had collected for us. These I explained to my companions as being the emblem of our land. Dorothy Even in our own lakes and rivers, gold mines, the great productive Northwest and of its general advantages, and 1 told them I thought the sun must feel it an honor to shine upon such a Dominion. After tea, I showed my cousins, as well as Uncle John, the "Farmer's Advocate," and told them that this was the best agricultural paper in the country, which was improving every year, and keeping step with the rapid progress of Canada. All we loyal Canadians feel like saying as the poet :

was waiting. After breakfast both ran into the parlor, and jumped up into the window-seat, to wait for the appearance of Uncle Dick. After having waited for "hours and hours," as the twins expressed it, they saw Nelly Bly's white there was an excited rush for the diningroom and mamma was demanded from all directions. After Uncle Dick had got Nelly Bly's blanket on and got to the door, there stood before him two small figures almost lost in shawls and mufflers. After having said good-bye to papa and mamma, they ran down the steps and out to the street. Uncle Dick picked them right up and put them in the bottom of the sleigh, for he thought that it would be much warmer than sitting upon the high seats. He and papa tucked them up with buffalo robes and blankets, and Uncle Dick got two hot bricks and put at their feet. Then the bells jingled and Nelly Bly trotted round the corner.

It was the most delightful ride the twins had had for some time. After a six-miles drive, Nellie Bly turned in the gate and trotted up to the door. Just then, Florence, who was twelve, and Gertrude, who was ten, came running out with exclamations of delight. Aunt Bess came out and took Dorothy up in her motherly arms, and Uncle Dick took Marjory, and they carried them into the house. After the twins had got warm, Aunt Bess came in with four glasses of milk and four pieces of pie for the little girls. When they had finished, they all put on their coats, hoods, mufflers and mittens, and went out to the barn, each carrying two apples for Nellie Bly, Queenie, Pet and the little colt, called Spitfire. After seeing all the cows, pigs, sheep and chickens, they went up in the mow and had a lovely time jumping in the straw. Then they all went into the house at the sound of Aunt Bess' dinner-bell. After dinner they stayed in the house, playing snap, buzz, crokinole and other games. Then Willie Stewart and his sister, Isabelle, came over with their new sleds, so they all went up to the hill, Florence taking her sled too. They had a lovely time coasting down the hill. Dorothy was on Sometimes the dog rides with me. Then, Florence's sled, Marjory on Willie's and in spare moments, I knit or sew. Icabelle and Gertrude were together. After they had got tired of sleigh-riding, they had a snowball battle, but in the middle of it they heard Aunt Bess ringing the bell again, so they all went into the house, and as soon as they opened the door a peculiar, sweet, sticky odor came out upon the frosty air. "Oh, mamma's making popcorn !" cried Florence. "Oh, goody, goody !" exclaimed Gertrude, dancing around the room and clapping her hands. And there by the table stood Aunt Bess pouring hot taffy over a pan of lovely popcorn. "Hurry up and get your things off, and I will give a prize to the one who can eat the most," said Aunt Bess, with a flourish of her big spoon. When they all were seated round the table, Aunty gave each a plateful. Then the contest began, and there was a great deal of laughter "to help choke it down," as Isabelle said. Willie managed to eat three platefuls, so he got the prize, which was a pincushion in the shape of a cob of Then they played blindman's buff corn. and hide-and-go-seek, and Auntie declared she would be deaf if they laughed riving from children who do not seem so much. They had supper at five, and at six o'clock they went out to the sleigh, Dorothy carrying a basket containing four fresh eggs for their and papa's and mamma's breakfast, four get to enclose your name, age and balls of popcorn and four apples, for Marjory declared that they were better rules will have no chance to win a than what they had at home. After all the good-byes had been said, Nelly Bly

started singing "Jingle Bells," to which Uncle Dick joined in the chorus, and, as the twins told mamma afterwards, it was MARGARET VEALE spent. Braemar, Ont.

(aged 11).

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CLASS IV.

A Day on a Canadian Farm.

As this is winter time, I will describe one of those days. In our family there are only three persons-my father and mother, and I am an only daughter. We are out of bed and dressed by six o'clock. At once, mother lights the fire, and then we all go to the barn, while the oatmeal, which constitutes the principal part of breakfast, is warming up, as we cook it over night in a double boiler. Mother milks the cows-we have five just now; while father first feeds the five horses. We have thirty-four cattle, seventeen sheep, ten hogs, and head coming around the corner. Then fifty hens. He then feeds the cattle. We have eighteen tied in the stable and eleven loose in the shed, and five calves in box stalls. I can help in many ways. He then feeds the sheep hay outside on the ground. By this time mother has finished milking, and we hurry to the house; the milk is strained, and the breakfast is soon ready. As soon as breakfast is over, a chapter is read and prayer; then we are ready to go on with our work. I feed and water the hens first thing, and father feeds the pigs, as we carry hot water from the house to the feed barrel in the barn to warm the feed. Then the stables are cleaned, the manure loaded on a sleigh and hauled to the field and spread. Then a batch of ensilage is mixed with cut feed for night and morning feed for the stock. The water is then pumped in two places-one from a cistern pump into an open shed into a tank, and the other from a spring well into a trough outside : then the cattle and horses are all turned out for water, where they can run outside, and fed hay on the ground. After they have eaten the hay and had a drink, they are let in and tied up.

Dinner is now ready, and we are ready for it. As soon as dinner is over, the hogs are fed.

In the afternoon father goes to the bush to cut wood. He has a man to help for the afternoon.

Then, at five o'clock, the stock are again fed, the cows milked, the sheep shut in for the night, and tea is ready. Then, after tea, when we have rested for a while, father goes to the barn to look the stock over and bed the cattle and horses for night, then comes to the house, and after reading or chatting for a while all are ready for bed. I have not been in school to-day, as it is too cold and stormy and the roads are all drifted up. I have no playmates but a dog and cat. Sometimes I ride down the hill at the barn approach in a sleigh. have knitted three pairs of mitts this

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foreheads, there are small air cells; but as they are not connected with our organs of breathing we cannot breathe by them. The way that a bird breathes with its bones will be better understood if first we speak of the lungs and tell you how different they are from those of the human being.

Instead of hanging freely suspended in the space we call the thorax, formed by the ribs and the sternum, the lungs of birds are fastened firmly on each side, the ribs so pressing them as always to hold them in place. Lungs, as you probably know, are made up of branching cells. The bird's lungs are no exception to that rule; but the strange thing is that the air does not only pass into but passes also through the lungs. In the throat of many birds the sort of tube through which the little creatures breathe has not the organ of voice at the upper end in the form of the small box we call the larynx and by which we speak and sing; the sounds made by bird-voices come from the lower end of the tube, which end is named the syrinx. On the under surface of the bird's lungs, toward the outer or middle part, there are four or five rounded openings. They are like the entrances of the air cells into the bones, and every one of them leads to an air cell. The whole cavity of the body in some birds is "occupied," as the ornithologists express it, "by sacculated air cells" from neck to tail, usually numbering ten, with live on each side, though two of them went downstairs to breakfast, where papa trotted down the lane, and the twins

"God bless our own Canadian land, Of mountain, lake and river,

Thy loyal sons from strand to strand Sing 'Canada Forever.'

MABEL YOUNG (aged 13). Massawippi, Que.

CLASS III. A Day on a Canadian Farm.

The first thing that the ten-year-old Beaton twins heard on the morning of the twentieth of January was mamma's voice beside the bed, calling, " Dorothy, Marjory ! the clock has struck half past seven, so it is time to get up." So, in less than two minutes, four little bare feet had bounded out on the soft carpet, and two little figures in pink nightgowns had run over to the window and pulled up the blind, for they had not forgotten that this was the day that Uncle Dick was to come in from the country to take them home with him to spend the day. After about a quarter of an hour they

winter for myself, and am now working on a pair of stockings. Then I sometimes help mother wash dishes, sweep and dust, and in many other ways. I do not cook much, but can make pudding sauce and bake pies. JEAN DEWAR (aged 9). Parkhill, Ont.

Prize Competition.

It has been suggested to me that something patriotic should be the subject of our next competition, so prizes will be given for the best essays on the Celebration of Empire Tell us your ideas about the Day. best way of celebrating this day in the country-we don't want to know how city people should keep it. You may describe something you have actually seen, or turn your essay into a story about an ideal Empire Day. 'Try to make it as interesting as possible, and be sure you get it written and posted in time. Essays for the last competition are still arto know that it was over long ago. All MSS. should be postmarked not later than May 24th. Write on one side of the paper only, and don't foraddress. Any one who breaks these prize. Address as usual.

COUSIN DOROTHY. Box 92, Newcastle, Ont.

God.

mite.

dregs of our life, the mites of our in-

come, keeping all the costly things

for ourselves. People are so ready

to excuse their shabby offerings by

saying that they are like the widow's

dare attempt to rival it? Only two

mites, which make a farthing—but it was all she had ; "All her living."

Are we afraid of suffering loss if

we make a real sacrifice and give to

God something we want ourselves?

tithes into the storehouse, that there

may be meat in Mine house, and

prove Me now herewith, saith the

Lord of hosts, if I will not open you

the windows of heaven, and pour you

out a blessing that there shall not

be room enough to receive it." God

always pays His debts, but money

given to the poor for the sake of

the high interest which He has prom-

ised is not really a gift at all; al-

though even that calculating generos-

ity usually pays well, for "the liberal

soul shall be made fat, and he that

watereth shall be watered also him-

'Twill come back in double weight.''

HOPE.

"Do a kindness, small or great;

cast into the treasury.

He has said.

That was the greatest gift



Will God Accept Our Offerings?

"It matters little what I drop

Into the passing plate;

500

'Tis God's acceptance that doth make The smallest offering great."

We are apt to imagine that God will accept any offering gladly-yes, even gratefully. We are very particular about our gifts to some people, but we know there are others so poor that they are thankful for anything that may be given them, even old things which are of no use to us. But let us never treat God as though He were a beggar, or offer Him only the dregs of our life, thinking that the things which are worthless to ourselves will be valuable in His eyes. Many things which are of little or no use to us might be very useful to some poorer neighbor, but in passing on such things, as, of course, we should do, let us never imagine that God owes us a debt of gratitude for them. He does not need our gifts, even those that are really valuable, for He says : "Every beast of the forest is Mine, and the cattle upon a thousand hills. . If I were hungry I would not tell thee, for the world is Mine, and the fullness thereof." He is willing to accept the very smallest offerings if they express love to Him or to men, but how often our gifts are weighed in the balances and found wantingnot pure gold, but light weight, showing a mixture of dross. Let us never forget that the two gifts praised by our Lord-the spikenard ointment and the widow's mite-were "very costly." His warning words still strike home : " Take heed that ye do not your alms before men, to be seen of them; otherwise ye have no reward of your Father which is in Heaven." Notice that He says "No re-ward!" Such gifts are entirely rejected by our King. It may be that some whose names stand prominently on numerous subscription lists may find that no record of their donations is kept in the Book of Life.

If we spend our best years in seeking our own pleasure and profit, fully intending to "become relig-" when we are older, have we ious any reason to think that God is sure to accept our blemished sacrifice? The prophet Malachi warned the Jews that God would reject their offerings if they brought 'that which was torn, and the lame, and the sick. He suggests that they should try the experiment of bringing such gifts to their governor, and see whether he would be pleased with them or accept them. Full of solemn warning are the words : " Cursed be the deceiver, which hath in his flock a male, and voweth, and sacrificeth unto the Lord a corrupt thing ; for I am a great King, saith the Lord of hosts, and My name is dreadful among the heathen." This is an age of "bargains," and the principle of getting the things we want as cheaply as possible has crept even into our religion. People come home from a bazaar or a social with the comfortable feeling that they have been "giving to God," and that He will repay them a hundredfold. Very often they have only bought something much cheaper than it could have been obtained anywhere else-for the day of exorbitant prices at church sales or suppers is a thing of the past-and yet they often feel quite injured and grumble a great deal because the programme, which is usually free, in the country at least, was not more interesting. In fact, they have got the worth of forty cents for a quarter, and yet wild climbing cucumber, which grows very fancy that they have been "giving" rapidly and looks so pretty. This to God ! Then there is the man who holds two of the pillars. On the other side

and thinks he is laying up treasure in heaven if he leaves a good sum to some charity in his will. He sacrifices absolutely nothing, for he has to give up his riches, anyway. The charity committee will probably feel grateful for the help, but God, who owns all the silver and gold in the world, does not need any man's assistance in carrying out His plans. Neither do such compulsory gifts benefit the man himself. Mrs. Whitney describes a man who is rich through fraud, and intends to straighten up everything before he dies by giving back the money to the rightful owner. In the meantime, he is determined to enjoy it as long as he dares. One day a friend startles him by saying : " Ev'ry day is takin' one more bite out of the apple afore you give it up. Don't offer the bare core to the Lord. He won't take it."

Let us give up bargaining with



self.'

Dear Friends,-

Once more I am leaving our "chat" wholly to guests who have come to us from afar to tell us of various things. I hope many of our circle will pick up suggestions from Miss M. H. R. O.'s letter, and that many others will receive help from the suggestions offered by Mrs. A. H. R. and Mrs. M. H. S. . . By the way, we have a whole battalion of "initials" to-day. Once more I would like to ask, why not choose some more distinctive name? In answer to my previous request in regard to this, Mrs. J. R. has already sent in word that all future communications from her are to be signed "Helpon-This is fine; "Helponaabit." bit" seems to mark our correspondent out so very much more strongly than just "Mrs. J. R." Will not others kindly follow this example, and, in future, wage war on the initials? Now, then, I must make some? The furnishing of my veranda way for Miss M. H. R. O., who cost us very little. There is not much wishes to tell us about an outdoor cozy corner

have some lilies of the valley, and on the porch, in some boxes nailed along the outside, we have planted the climbing nasturtium. which, besides looking pretty, furnishes us with most of the table flowers.

We live just opposite a woods, and in this woods we find an abundance of ferns and bulrushes, which, when potted and placed on the floor and on small tables here and there, help to give the spot a clozy appearance. One table I made out of a very old washstand, which, with some of the boards knocked off and two coats of dark brown paint, answers the purpose very well, besides looking kind of pretty, too. In one corner, which the tree shades, I put a hammock, made out of barrel staves. I covered this hammock with some pretty but inexpensive cover; then put on a couple of cushions, and it proves irresistible. I haven't enough suitable seats. I wonder

if someone will tell me how to make work connected with it from beginning to end, and when we consider and comfortable it is, we are glad to do it.

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attached as well, ine suits are all the latest spring styles. The sizes are from a 14-year-old girl to a stout woman, 44 bust. Any suit can be returned if not entirely satisfactory and money could be the store of well the suite length refunded. Send bust and waist measure, length from neck to belt in back, sleeve length under seam; also length front, side and back of skirt and around hip. Perfect satisfaction guaranteed. Mention this paper. Send this ad.

AN OUTDOOR COZY CORNER.

Dear Dame Durden,-I have read your Ingle Nook Chats for some time past, and have enjoyed them so much. I think it a very good idea to give us such a nice list to write about. Surely everyone will know something about some of them. I shall try to contribute my little share, and have chosen as my topic, "Anything that you have made beautiful." What I did make beautiful was a large veranda on the west side of the house. The house is about thirtyfive years old, and has not been painted lately, consequently the paint is almost all worn off, and so it has a rather funny appearance. There is a large apple tree just at the north-west corner of the porch, which shades about onehalf of it; the other part was open to the fierce heat of the sun almost all day during the summer. It is built about four feet above the ground and has a railing around it on three sides with a little gate in the center leading on to the steps. On the south side, we put a bed of climbing roses, which cover the railing, and along one part of the front some rosebushes and a few plants of the creeper I trained over the railing and up on to his memory as long as he can, of the steps, under the apple tree, we

Perhaps my letter is too long, but 1 shall soon stop. I only wish to ask someone to [write about some pretty collars and belts, and how to make new cushions, and those little things we need so much in the home.

About the badge. How would you like a little flower, perhaps a marguerite, or something made out of silk? Must they all be for women, or may girls wear them, too? M. H. R. O.

Certainly, the girls may wear the badge, too, M. H. R. O.; that is, if we decide to adopt one. We have quite as many girls as women in our Circle. 'The marguerite would be very pretty. What do the rest of our members think about it? Shall we have a badge at all ; if so, what will it be-a marguerite (ox-eye daisy), or something else? Let us hear from you about the matter. won't you, please? . . . By the way, Miss M. H. R. O., would you mind writing us again to tell us exactly how you made your barrel-stave hammock? The summer will soon be here, and we'll be needing hammocks, you know, so will be glad to get some hints from you on the sub-

SOME SUET RECIPES Dear Dame Durden,-I often think of D. A. GRAHAN, - Thedford, Ont.

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X-RAYS-Electricity in all its varied forms and high frequency our-rents used successfully in the treatment of cancer, fibroids, goitre, sciatica, asthma, chronic rheuma-tism, all forms of nervous ailments, sexual foilies, rupture, varicocele, tubercular glands and joints, paralysis (some forms), facial blemishes, superflucus bair, etc., catarrah of the nose and throat, and other chronic ailments. For further inform ation address, DR. J. E. HETT. BERLIN, ONT.

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EGGS FOR SALE

From the following varieties: W. and Barred Rocks, Buff Orpingtons, W. and S. L. Wyandottes, W. and Brown Leghorns, \$1.00 per 13. Imperial Pekin duck eggs, \$1 per 11. Toulonse geese eggs, 40c. each. M. Bronze turkey eggs, 25c. each. And some choice young Berkshire pigs. o

APRIL 7, 1904

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THE FARMERS ADVOCATE.

poor "Tenderfoot," with his small piece of butter and his large piece of suet, and as I can sympathize with him, having been in the same predicament myself, I am sending him some recipes.

1 .-- Marmalade Pudding-One cup bread crumbs, one cup flour, two ounces suet, one teaspoon baking soda, one tablespoon sugar, three tablespoons marmalade or syrup. Chop suet fine, add other ingredients, mix well, then mix with a little buttermilk or sour milk till whole is wet (not very moist); beat up with fork, grease a bowl or agate puddingbasin; cover with a greased paper, and steam for two and one-half hours.

2.-Jam Rolly-One cup flour, one cup bread-crumbs, two ounces suet chopped fine, one tablespoon sugar, one small teaspoon soda; mix with cold water into stiff paste. Roll out thin, line greased bowl or basin, put in a layer of jam, then paste, etc.; top layer of paste. Turn edges down; cover with greased paper, and steam for two hours. May use apples, instead of jam.

3.- Honeycomb Pudding - One cup chopped suet, one cup raisins, one-half cup molasses, one cup sour milk, one large teaspoon soda, three cups flour. Steam three hours in greased and covered basin.

Always have water boiling and steamer on before putting pudding on to cook, and keep it boiling. I use a teacup to measure my ingredients.

4.-Suet Piecrust-One pound of flour. one-quarter pound beef suet chopped fine, one-half pint water, one-half teaspoon salt, one teaspoon baking powder. Mix other large piece. As Frank took the the baking powder and salt with the flour, then mix in the chopped suet, and last of all the water to make a nice dough. Do not knead the dough, but roll it out and get it into the oven as have taken?" quickly as possible. MRS. A. H. R.

FROM A "DON'T SIGH " HOUSE-KEEPER.

Dear Dame Durden,-The "Advocate" has come to our home for a number of years, and we value it very highly, especially since it comes weekly, I have often thought of writing a few lines to you and sending a few of my recipes to help others. I am a farmer's wife, and can find plenty of time for a little enjoyment along with the work. I think by planning our work a little ahead we can find time for a social evening now and again. I always think there is some mistake when I hear farmers' wives sigh and say they are so busy they can't find time to go from home.

I use homemade washing-fluid, made as follows: take contents one can Gillett's lye and one gallon boiling water; let stand till cold, then add two quarts cold water, one-half oz. salts tartar, one oz. ammonia. On wash-day put three pails through some mistake, letters find their way to the wrong department, hence some delay is occasioned. order, therefore, to forestall possible mischances of this or any other kind, will competitors kindly send in their letters as soon as possible? Don't leave it off until the last week; write your essays now, and send them in. If you have forgotten what the competition is, look back at your number of the "Farmer's Advocate " for March 23rd. As before, address your letters to

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

Humorous.

Question-If germs germinate in Germany and parasites reside in Paris, what will we find in Cork? Answer-Mike-robes.

A doctor attending a punster, who was very ill, apologized for being late one day by saying that he had to stop to see a man who had fallen down a well. "Did he kick the bucket, doctor?" groaned the punster.

There was company at the table. The plate of cake was first passed to the guest, who took one of the larger pieces; then to Johnny, who took the remaining small piece, he said, under his breath, to his brother : " Pig ! "

"Well," said Johnny, "if it had been passed to you first, which would you

"The small piece, of course," said Frank, with righteous indignation.

"Well, then, what are you grumbling about? That's the piece you got, isn't it ? "

"Yes, Miss, my old man he's right poorly. Th' doctor says he won't never be no better."

"But what is the matter? He seems to be strong and healthy looking.'

"Yes, Miss, but he's got the chronicles."

"The chronicles?" echoed her aston-"Where-where does he ished listener. have them ? "

" In his tubes. Miss."

And it needed a visit to the man's physician before the district nurse discovered that the man had chronic bronchial trouble.-Mary J. Austin.

TOO LATE.

"During my second year at College," good soft water in boiler, one-half pound said a prominent doctor, "I had a classgood soap cut fine, and one cup fluid. mate whom it would not be uncharitable Put in soiled white clothes; let boil ten to call a dullard. One of the prominutes, stirring often, then wash, rinse fessors was in the habit of taking the boys unawares and quizzing them. He said to this fellow one day: 'How much is a dose of ---?' giving the technical name of croton oil.



continent are taking advantage of the opportunities we are offering. WHY NOT YOU? Come West this spring. Stop at



Buy some of our land and you will not regret it. Give me the pleasure of showing you where to find THE BEST and you will have a kind word in my favor ever after.

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How long are you going to think about settling there? Every year you let pass means a loss of opportunity. Perhaps you have a small farm in Eastern Canada that cannot be operated at a profit, yet can be disposed of for an amount that will enable you to

BUY A FERTILE PLACE IN THE TERRITORIES. Perhaps you have been paying rent and have been able to save a FEW HUNDRED DOLLARS.

We have quarter sections and half sections for sale, from \$6 an acre up, ON EASY TERMS. Start now; become independent. Write us; come and see us. The Tracksell Land & Investment Co., Ltd., REGINA, NORTHWEST TERRITORIES.

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blue. I always have my washing on the line long before the dinner hour. On bread-baking day I use American yeast, which only takes six hours, as you always have your yeast made to bake any day. Will write the recipe again, if any of the friends would like it.

Kisses .- Three whites of eggs beaten stiff, one cup white sugar ; put in a double boiler, stir till cooked; then add two tablespoons corn starch and two cups cocoanut. Flavor to taste, drop on buttered paper, and bake. This recipe makes five dozen kisses.

Pork Cake. - One-half pound pork chopped fine, one cup boiling water, one cup syrup, one teaspoon soda, two of cream tartar, one cup sugar, peel and spice to taste; thicken with flour as stiff as fruit cake.

Omelet.-For each person to be served use one egg, one tablespoon milk, salt and pepper. Beat the eggs separately. mix yolks with milk, pepper and salt. Have your pan hot and well buttered. Pour on liquid, and when it sets spread on the whites; let cook a little longer, then fold the one half over the other, and serve hot. This looks very pretty, the white part being between the yellow outside.

Wishing you every success, I remain, Yours, MRS. M. H. S.

A word to those who are writing on the last Ingle Nook competition it happens that, [New England Farmer. Occasionally

"' ' A teaspoonful,' was the ready reply.

"The professor made no comment, and the fellow soon realized that he had made a mistake. After a quarter of an hour, he said: 'Professor, I want to change my answer to that question.'

"'' It's too late, Mr. ----,' responded the professor, looking at his watch, 'Your patient's been dead fourteen minutes.'

FUN FOR LITTLE FOLKS.

Take a lemon, stick in tooth-picks for legs and shoe-buttons for eyes; slit a little of the rind for the ears; put a little darning cotton on a pin and add for the tail. "This is a pig."

For a bug, choose a good-sized prune, using cloves for feet and acacia buds for the nose; one with the blossom off is best for the tail.

Clowns.-A chocolate drop, and an English walnut, with different colored paper frills stuck on with paste, are excellent; different expressions are cut in

chocolates and painted on the nuts. Quite a "Noah's Ark" of animals can be manufactured out of prunes, nuts, raisins, and other fruits, with bits of wire, tocth-picks, horse hairs, etc., if the children will exercise a little ingenuity .--

New White Marvel Oat

The BEST thing offered for a long time. The BEST OAT ever developed. The HEAVIEST YIELDING OAT ever intro-duced. Large, Handsome, PLUMP, white grains. Unusually VIGOROUS, and nothing short of a cyclone will lodge them. Has WONDERFUL STOOLING qualities. Requires LESS GRAIN to the acre than other varieties.

This splendid new oat is the best thing offered for a long time; indeed, we think it is the best oat ever developed. It is a genuine agricultural trophy and prizewinner. The yield of White Marvel oats has reached as much as 4,752 pounds of cleaned seed per acre. This is 108 bushels of 44 pounds each, or nearly 150 bushels of 32 pounds each. The large white grains are plump and handsome. The straw is very strong and stands up well. The blade is double the size of ordinary oats, which attests the vigor and productive capacity of the strain. White Marvel is remarkable for its great stooling capacity, and for this reason the seeding requirements should not be more than six pecks per acre. We believe that this new oat, by crop has heretofore been a failure, or only a partial success. In all cat growing sections the White Marvel will prove to be a perfect treasure, not only in the way of heavy production, but in point of quality. We therefore recommend it to customers in strong terms. We may add that this variety shows a marked disposition to produce three full kernels on each spikelet, thus adding enormously to the yield. One 1b., 25c.; 3 lbs., 60c.; 5 lbs., 85c., We have also good things in Barley, Peas, Corn, Spring Wheats, Millet and other fodder plants. Send for our beautifully-illustrated and descriptive seed catalogue, free to all who apply. Address all orders to

apply. Address all orders to

121 Dundas St. DARCH & HUNTER, London, Ont.



The other day I met a woman on is effective when done with caution. the street who had pinned to her coat a bunch of the most exquisite sweet peas. They were greenhouse "forced " ones, to be sure, but they set me to thinking that, ere this, something should have appeared in the Flower Department regarding the culture of these beautiful flowers, which have, besides their beauty, so many other qualifications to recommend them. In the first place, they are possessed of infinite variety; if you plant a mixture of choice kinds. you may rest assured that there will be something new to look for every morning in your sweet pea border. There will be white, pink, salmon, purple and crimson ones, streaked ones, white ones with pink or heliotrope edges, others with standard of one color and wings of another, and so on an infinitum-a perpetual feast of interest and pleasure to you. In the second, the perfume of the sweet pea is so subtle and delicate that it can never be offensive to sensitive persons, as the heavier odors of lemon or June lilies, phlox, etc., sometimes are. Last of all, the flowering period is unusually long; at least, one can make it so by persistently keeping the pods off the vines. The more blossoms you cut the more you will have. You may keep bouquets on your table, give them to friends and send them to the sick to your heart's desire, yet, like the widow's cruse of oil, your border "will not fail," and, like the "thing of beauty" that it is, will be a "joy forever" to you until the severe frosts of coming winter bring death to all the vegetable world.

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The culture of the sweet pea is not difficult, yet, if wrong methods be used, it is easy to make a failure of it. One thing calls for especial attention-care in the use of fertilizers. Sweet peas are not gross feeders, and it takes very little too much of these rich plant foods to "burn" them, especially during the early stages of growth. In rich garden loam they do very well without any, or in an old chipyard, which seems to suit them to perfection. In such a situation, all that is necessary to be done is to dig a trench about eight inches deep, scatter the seed along in double or triple rows about eight inches apart, and cover it over with about two inches of soil, which should be packed down rather firmly. So much for the planting, which should be done just as soon as frost is out of the ground in the spring and in the sunniest position possible. When the plants come up they should be watered from time to time, as necessary, and should, as they grow taller, have the earth drawn in about the stalks until the trench is nearly filled up, just a hollow being left for convenience in watering. This treatment will give the roots the cool depth which they love. Once the plants come near the blooming stage a great deal of water is necessary. It should always be applied in the evening, and so liberally that it is sure to go right down about the roots where it is needed. Washsuds are fine for watering, and should be put on every week from this time forward. One precaution which I forgot to mention above is that sweet peas should never be planted close to the wall of a house. It is said that they do best when the rows run from north to south. If, however, the soil is light and poor, a little fertilizer should be hoed in from time to time after the plants are large enough to bear it. This may consist of old, well-rotted manure, or unleached hardwood ashes. If you doose, you may pour in dilute manure water about the roots. Some recommend justing the fertilizer right in the meach, a method which by visitors, it makes them nervous

The best plan, when this is done, is to make the trench in the fall, putting the manure in the bottom, and covering it over with fully eight inches of soil, so that the little rootlets may not reach the manure too Fresh manure should never soon. be used for flowers.

Being vinelike in nature, sweet peas, of course, require support. If planted in rows, stakes driven in at each end, with stout wires stretched between, answer the purpose very well; or, two screens of poultry netting may be stretched along, one on either side of the border. If. however, the shape of your lawn or garden seems to require clumps or small beds, rather than borders or hedges, you may dispose your peas in that way, and simply drive in stakes about and throughout the beds for FLORA FERNLEAF. support. "Farmer's Advocate " office, Lon-

don, Ont.

A SHIPLOAD OF EASTER LILIES. The first shipload of Easter lilies

from Bermuda arrived in New York on March 22nd. There were thousands of crates in the cargo, most of the consignments being destined for the far west. Since then, similar shiploads have arrived in the great American metropolis.

THE CULT OF THE SWEET PEA. (The "Westminster Budget.")

One of the most successful sweetpea cultivators is a gentleman whose business is on the Stock Exchange. He is an enthusiast, and has been so carried away by the poetry and beauty of the fragrant flowers he grows so well that, when lecturing recently on the culture of sweet peas, he summarized his sound advice in the following rhyme, which appears in the Gardener's Magazine :

> 'The deeper you trench The finer the pea, The thinner you sow The stronger they'll be

" Keep using the hoe, And, take it from me, The more blossom cut The more you will see.

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ollege, Toronto. Right Rev. A. Sweatman, Bishop of Toronto.

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Now is the best time to enter. The January rush is now over. The beginners are well started in their work, and teachers can there

started in their work, and teachers can there-fore give more time to new students. It is now current talk throughout the country that the student who intends to take a business or shorthand course, and wants to be placed in a paying place when graduated, should attend the

Canada Business College, Chatham, Ont.

Students of last year already carning over \$1000 per annum 346 placed in 11 months. Do you know of any ot

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HEALTH IN THE HOME. By a Trained Nurse

Some Remarks About Babies. and, consequently, cross. The per-

It must be admitted that the care of a child is a most exacting and even tedious matter if proper attention is given, but much trouble and anxiety later on are saved by doing the right thing in the beginning, to say nothing of the moral responsibility, and the love which rightlyconstituted human beings feel for a child that is helpless and dependent upon them for its future chances in life, as well as its immediate necessities. A mother who wishes to do the right thing for the baby will

BATHE HIM REGULARLY EVERY MORNING.

Soap him all over hair and all, the face having been washed and dried separately, and put him right into the water to be rinsed, supporting the head and shoulders firmly with one hand and arm. The room and water should be comfortably warm. Use pure castile soap, dry

son holding a baby should do it in such a way that he feels safe, and if he is placed in a sitting position on the arm his back should be supported with the other hand; in the first place, because he is not strong enough to maintain a balance alone, and, secondly, because he may give a sudden spring and fall backward, and perhaps injure himself internally. He should not be left too long in one position. Sometimes he cries simply because he is tired and cannot move himself. He should not be rocked vigorously in a cradle, or tossed in the air, or jerked up and down on someone's knee to stop his crying or to amuse him. Babies cry because they are hungry, or wet, or otherwise uncomfortable-quite often because their feet are cold. I need not say that no pins should be used except safety pins, and nothing should be pinned at the back or sides of the child—it is very uncomfortable to lie on pins. Never wake him from sleep to be shown off to friends, and make him take his afternoon nap and go to bed at night at regular times. At night, his face and hands should be washed, his day clothes removed and a loose nightdress put on; he should be fed, his feet warmed, and be put to bed. No child is too young to learn good or bad habits, and it is no effort for him to learn either when very young. See that the room is well ventilated, and the crib shaded from the light. A baby should be given a little ordinary cold water occasionally, and can take as much as he wants when old enough to make his wants known.

thoroughly with a soft towel, and powder with talcum powder in the Fat babies often become creases. badly chafed from want of this sort of care. It must be remembered that nothing whatever can supply the place of the daily soap-and-water bath. Babies should be kept dry and clean all the time. Change them directly it becomes necessary, wash off with soap and water, dry thoroughly, and powder, replacing the soiled cloth with a perfectly clean one, not one that has been merely dried. If, through some accident, the child has become chafed, the first proceeding for his relief is the washing with soap and water. In a bad case scorched rags are useful as an application, being, if not handled, except by the corners, practically an antiseptic dressing. Babies never get into this condition except through neglect, except under very unusual conditions. A baby's clothes should be warm enough to protect him, but not too warm, and not heavy ; they should be loose. It is best to have no bands in his dresses around the lody, and he should have a chance to kick when so disposed. Put the clothes on over the feet, not the head.

BABIES SHOULD NOT BE HAN DLED INDISCRIMINATELY

UNDER NO CIRCUMSTANCES SHOULD

he be given bits of meat and filed potatoes or candy, or sips of tea or beer. It is a pity that people accustom their children to consider candy the most desirable treat. It would be a better plan to give them fruit. A young and growing child should not be allowed to carry the baby about, for both their sakes. A baby should not be given anything to play with that has sharp edges or points, nor anything small enough to be put into the mouth or pushed into the nose. Money is a dangerous thing, for it will certainly be put into the mouth, and, even if not swallowed, may cause an inflammation or something

etting such r We pay your railway fare.

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5 SHORTHORN BULLS 1 red imported bull, coming 3 years; 2 bulls im-ported in dam, one red and one roan, coming 1 year; 1 red from imported sire and dam; 1 red, sixteen months, from Scotch dam and sire; also heifers cf all ages for sale.

ALEX. BURNS, ROCKWOOD P. O. and STATION, G.T.R.

Young Lady (to very new salesman)-"Have you a book called 'An Essay on Irish Bulls ?'" Salesman-" No, miss. We haven't any works on live stock."

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APRIL 7, 1904

unsanitary.

THE FARMERS ADVOCATE. worse. There is nothing much more

BABIES AND CHILDREN SHOULD NEVER BE STARTLED.

It is the poorest known way of amusing them, and, from any other point

of view, is criminal; nor should they be SENT INTO THE SUN BARE-

HEADED,

or protected only by a little Dutch cap, which, though very pretty, is quite useless. The little one's head is not protected by a thick crop of hair, nor has his skull attained the hardness of maturity, and even grown persons shade their eyes from the glare. It is a curious and astounding sight to see a devoted mother. her own head and eyes well protected by coils of hair and hat, wheeling her baby, not protected at all into the blazing sun.

It is certainly true that babies suffer many things at the hands of parents who would willingly die for them. Children do not always, nor perhaps often, come to immediate harm from neglect of the precautions herein mentioned, but when the time arrives for society to take stock of them as grown individuals, their physical and perhaps moral assets will be more considerable if their parents have accustomed them to good habits from the beginning, and exercised reasonable care to save them from dyspepsia, weak eyes, crooked backs, bandy legs, nervous disorders and decayed teeth, all of which may be largely influenced by care in childhood.

ALICE G. OWEN March 26, '04.

A WAR PUZZLE

SOLVE IT AND GET THE MONEY. Can you answer this riddle? "Why are Dunlop Detachable Tires like the Japanese?" The Dunlop Tire Co., Ltd., Toronto, will give ten dollars for the best answer posted to them before April 30th. The company bars out the simple one: "Because they are hard to beat." Can't you think of another re-Send it on the back of a postal ply. card under your name and address. Remember Dunlop Detachable Bicycle Tires are world-famous. Two hands are the only tools you need in taking them off or putting them on. Advt.

QUESTIONS AND ANSWERS Veterinary.

MARE WITH SORE MCUTH.

Have mare coming five years old, has a lot of small pimples in mouth, around lips and some on gums. They appear as though they come to a head and break. None on the outside or place else on body. Has plenty of life when driven, but she is not eating much and drinking very little. Would like to know cause, and what you consider the way to treat same? FARMER.

Of all the financial institutions of Canada receiving money on deposit, only three have a paid-up Capital as great as that of the CANADA PERMANENT MORIGAGE CORPORATION, Toronto

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be opened with one dollar. Interest allowed at three and one half per cent. per annum, compounded half-yearly.

You can quite conveniently deposit by mail. Write to day for our Booklet, "SAVING MONEY BY MAIL." o



1 bull, 3 years old, imported from H. D. Roe, Augusta, N. J.; 2 bulls ready for service, 5 bulls from 3 to 6 months old, 7 cows milking and 16 dre to freshen by May 20th, 6 heifer calves from 1 to 11 months old. Am giving up farm, and all will be sold Tuesday, May 3, at I o'clock p. m.,

on lot 22, con. 8, Townsend, 1 mile from Villa Nova, 5 miles from Waterford and 6 miles from Hagersville, G. T. R. Terms: 6 months' credit

JAS. DUNLOP, Auctioneer.

D. JONES, JR., VILLA NOVA, PROPRIETOR.



GOSSIP.

503

There are some good things in the poultry line offered in the advertisement of D. A. Graham. Thedford. Look it up, if in need of duck, turkey, geese or poultry eggs.

Ten young Holstein bulls are advertised for sale by Mr. G. W. Clemons, St. George, Ont., Secretary of Canadian Holstein Association, the get of his triple champion Lull, Count Mink Mercedes, his best son, Count of Maple Hill, a Toronto first-prize winner, and other high-class sires in the Maple Hill herd, and from deep-milking dams of the best breeding and type. These young bulls should quickly find places in good dairy herds. Write Mr. Clemons at once for prices and particulars, as it's a case of first come first served, and procrastination is the thief of time.

Spring Hill Farm, within one mile of Maxville Station, Canada Atlantic R. R., about forty miles from Ottawa, recently visited by a representative of the "Farmer's Advocate," is owned by Robt. Hunter & Sons, whose advertisement runs in this paper, and is the home of some forty head of high-class Ayrshires, imported and home-bred. Lessnessock King of Beauty (imp.) heads the herd. He is good enough to have won first prize as a two-year-old at Toronto last fall in a very strong class, which means a great deal. Messrs. Hunter have several cows in calf to this bull, and judging from the appearance of the first of his get horn here, this bull is going to be an excellent and impressive sire. This calf is from Stylish Alice of Lessnessock (imp.), the first-prize two-yearold heifer at Toronto last fall. Queen of the Sonsies (imp.), a second-prize winner at Toronto and Ottawa, has continued to improve. The young stock in this herd is sired by Glenora Mint, by Comrade of Garlaff (imp.), out of Alice of Lessnessock (imp.). There are, all told, ten imported cows here, as well as eight young things imported, selected in person, on individual merit. There are three young bulls here yet for sale, among them being a July calf, imported in his dam (Kirkland Sparrow) a good one, well-marked with dark red spots, a deep-bodied fellow, with wellsprung ribs. Individual testing has not been carried on here to any great ex-Stylish Alice's test is probably tent. one of the highest testing, viz: 5.6 per cent. butter-fat, three months after calving, principally on grass pasture. Kirkland Sparrow, the dam of the bull above mentioned, has every appearance of being a big producer. Beauty of Spring Hill, the dam of the third-prize Canadian-bred Ayrshire at Ottawa, 1903, in a class of fourteen, has a record of 50 lbs. of 5.6 per cent. milk. Wee Maggie, the third-prize winner, above mentioned; also has an excellent appearance. This herd has been selected especially from

Ans.-The horse is suffering from aptha, a contagious eruptive condition of the mucous membrane. Use a solution of alum and borax, or potassium chlorate, applied locally; or one dram of the dry powder placed on the tongue three times a day. Wash mouth with permanganate of potash, five grains to an ounce of water. Feed soft, nourishing food. Cause is supposed to be from eating coarse, harsh feed, which irritates lining membrane of digestive track.

TRADE TOPIC.

FARM IMPLEMENTS. - When buying implements it is always an advantage to secure as many combinations as possible, so long as they are convenient. One of the best of these combinations on the market to-day is the stock and hay rack made by the Milner-Petrolia Wagon Co. In itself, this rack is unique. It is light, strong and handy; but when set upon their especially - constructed farm truck, the combination is doubly convenient. It is a time and labor-saver. It is made by a most reliable firm, in one of the very best of our Canadian factories, and we bespeak for this truck and rack a warm reception by the Canadian farmers.

YORKSHIRE SWINE

AT

Markham, Ont., Wednesday, April 13, 1904.

The above were carefully selected by one of the most competent judges in Scotland, and are in excellent breeding condition. For catalogues and further information, apply to

GEORGE ISAAC, COBOURG, PROPRIETOR.

Capt. T. E. Robson, Auctioneer.

Conveyances will meet C. P. R. trains on morning of sale.

large-tested stock. They are thus overcoming the greatest difficulty the Ayrshires have had to contend with. Messrs. Hunter made thirteen entries at the Dominion Exhibition, Toronto, last fall, and carried off six firsts and six second prizes. Continued success is the wish of the "Advocate," and in the hands of such competent judges, careful management and fair dealing, this is reasonably well assured.

DISPERSION SALE 21 High-Class AYRSHIRES 16 Females and 5 Bulls (1 imp.) To be sold by Public Auction on Wednesday, April 13th, 1904. There are also to be sold 10 GRADE FEMALES, all due to calve to Lessnessock Reliance (imp) There will be no reserve. TERMS.-On all sums over \$20, 9 months SALE TO BEGIN AT 12 O'CLOOK. Teams will meet passengers at Carr's Cross-ing, on G.T.R, and Athelstan, on N.Y.C., on the morning of the day of sale. D. A. Macfarlane. Prop., - Kelso Farm, KELSO, QUE. A. Philps, Auctioneer, Huntingdon.

501

London High-grade **Coiled** Spring Wire is Good Wire.

It has a spring and life in it when you handle it that other wires do not have. We want farmers to use our high grade London wire with our London Fence Machines, because for the sake of their reputation we don't want London Fences made from inferior wire.

London coiled wire has a tin tag on every bundle, like the cut shown. Our No. 12 Highgrade Coiled Wire is over twenty-five per cent. stronger than any other make of same gauge.

USE LONDON BALLED WIRE

.n balls ready for weav ing (put up in 100-pound sacks). Our No. 13 Weaving Wire it made espe-cially for our use.

Ask your dealer or our agent for London Wire. It can't be beat. Take no other.

London Fence **Machine Co**

LONDON, ONT.

GOSSIP

Messrs. S. J. Pearson, Son & Co., Meadowvale, Ont., breeders of Scotch J. F. Parsons & Sons, Barnston, Que., Shorthorns and Berkshire swine, make a change in their advertisement, in which who make a specialty of breeding Ayrthey offer three young bulls, from 10 to shire cattle, Chester White swine and 18 months old, of the low-down, thick- Barred Rock fowls. fleshed sort. This firm has spared no expense in laying the foundation of an up-to-date herd, at the head of which is Burnside, a son of the champion bull, the grand roan two-year-old bull, Trout Duke of Clarence of Barcheskie (imp.), at Creek Banff, by the \$5,000 champion their head, and a good bull for producbull, Imp. Lord Banff, and out of Imp. ing deep-milking Ayrshires. Among the Proud Amaranth, bred by Mr. Duthie, by the Highland Society champion, Pride of Morning. The Berkshires bred by this bull, Fighting Mack. The foundation of firm are also of the best type and breed this herd was laid upon a solid founda-

Within about four miles of the town of Coaticooke, Que., is the home of Messrs. who advertise in the "Advocate," and There are at present twenty-four females in the Ayrshire herd, with Master Clarence of young stock are several nice ones, both male and female, got by the Reford-bred

tee of its quality. Among the best in

esentatives from Isaleigh

THE FARMERS ADVOCATE. This cut represents our

> **1 TRUCK** WITH COMBINATION STOCK AND HAY RACK. Height of wheels : Front, 3 ft. 6 in.; Hind, 3 ft. 10 in.

It is a)very popular wagon for all general purposes. Sold with or without the rack.

We make all kinds of FARM and TEAMING WAGONS. from one to eight tons' capacity.

In EXCELLENCE OF DESIGN, WORKMANSHIP and QUALITY OF MATERIAL they are unsurpassed.



WRITE FOR OUR NEW ILLUSTRATED CATALOGUE.

COSSIP.

Mr. W. F. Stephen, Spring Brook Farm, Trout River, Que., breeder of Ayrshire cattle, writes that his herd has come through the winter in good shape, that the demand for young bulls has been good, that he has sold all old enough for service, and that he is prepared to book orders for bull calves from heavy-milking, high-testing cows,



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Write them for prices, or call at tion, having rep their farm, which is close to C. P. R. Grange, Ness, Reford and Robertson stations at Streetsville and Meadowvale, herds, which in itsell is a good guaranand only 20 miles from Toronto.

the herd is a home-bred cow, Princess of D. Milne, Ethel, Ont, writes: Homecroft. She has given 44 lbs. of ex-Mr. "Our herd of Shorthorns are doing cellent milk per day on dry feed without well. Calves are coming strong, thick, any forcing. This herd has suffered and good colors. The bulls we are along with all others in this district on offering will compare favorably with the account of the great drouth that pre-best in the province, among them being : vailed in many parts of Quebec during **Onward** =50344=, got by Red Duke (imp.) =36084= (77585). His dam, by shortened the feed supply, but also the the Mina bull, Red Knicht (imp.) water supply. All things considered, the =4123= (54904), is a grand cow, and an herd looks healthy and well. The exceptionally good milker. Golden Hope Messrs, Parsons have not many hogs on =49953=, two years old, is a bull hard hand just now, only offering for sale at to turn down in any company; has taken present three sows, bred, and three three firsts at three county shows, and boars fit for service. They are from his breeding is straight Scotch. He is stock purchased from H. George & Sons. also a grand stock-getter, and very They will have young pigs for sale later. quiet. Matchless Duke, by Red Duke The Ratied Rocks that are kept here are (imp.) =36084= (77585), dam by Match- also of the best; first-prize cockerels beless of Elmhurst 13th, is a good young ing used in matine. The pullets are bull, and one of the best-tred Cruick-shank Matchlesses. Another is a very Color. We heppeak for Messrs, Parsons pretty Duchess of Gloster, by World's a fair shall of the patronage of "Advocate " re-Fair King =38431=."

and large teats as indicated in his advertisement in this issue.

TRADE TOPIC.

THE COOPER-WALCH LAND CO .-The attention of our readers who are interested in the Canadian West is called to the advertisement of the Cooper-Walch Land Co., of Winnipeg. Settlers going into our great prairie country will be astounded by the magnitude of the territory and stretch of distances. Without having a definite object in view, much valuable time will be lost in investigating localities. To facilitate matters of this kind, the Cooper-Walch Company are prepared to give details of the conditions of the climate, soil, etc., in widely different parts of Manitoba, Assiniboia and Alberta. They will also provide guides and transportation to intending settlers in the districts where their lands are located. Lands in all stages of improvement, as well as the wild prairie, can be had from this company. See their advertisemen't.

LONDON, ONTARIO.

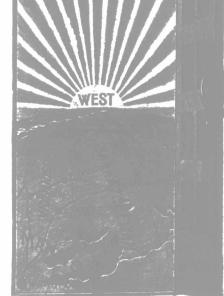
FENCE LAMB GATE. AND

No. 9 High Carbon Wire has a tensile strength of over 2,400 pounds. A ten-wire fence with a tensile strength of over 12 tons. Lamb Fetce is made of High Carbon Wire. Address:

The H. R. Lamb Fence Co.

WINNEPEG, MANITOBA.

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



ACRES 200,000

of the best wheat and flax lands in Western Canada at from \$7 TO \$10 PER ACRE, on very easy terms of payment. For maps, etc., write to

THE COOPER-WALCH LAND CO., 48 CANADA LIFE BUILDING, WINNIPEG, MANITOBA.

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APRIL 7, 1904

QUESTIONS AND ANSWERS.

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

Miscellaneous.

HOUDANS WANTED.

A reader would like to communicate with breeders of Houdans. Interested parties would find it to their advantage to advertise in this journal. W. A. H.

VARIETIES OF OATS.

Will you kindly let us know through the "Advocate" if you have had any experience with the Sheffield Standard oat? I have seen, it greatly advertised as a great oat. Please let us know if you know of any better kind. W.C.N.

Ans .- We are not personally familiar with this oat. Prof. Zavitz's report for 1901 says the White Siberian Oderbrucker, Vick's American Banner and Bavarian are among the very best varieties of oats for early cropping. Danberry and Alaska are two early varieties.

MOTHS IN HIVES.

How can we get rid of moths in beehives? One of our skips died this fall, and when we took it up we found the moths had taken possession of it.

J. E. G.

MORLEY PETTIT.

Ans .-- If the hive has not been kept in a warm place the wax worms are probably all dead now, as they cannot stand much cold. Moths can do no harm in hives which contain a fairly strong colony of bees with a good queen. So soon as the bees are dead the moths come in, if the weather is warm enough for them to fly and deposit eggs. The eggs hatch into the larvæ commonly called wax worms, which destroy the combs.

KEEPING POTATOES GRAFTING.

1. What is the best way to keep potatoes from sprouting in the spring? Do you advise putting them on an earth floor, or on straw?

2. Would you advise top-grafting Snow apple, Greening and Sweet apple trees, say with Baldwins or Spies? None of these varieties are good shipping apples, therefore it is always a trouble to dispose of them. M. D.

Ans .- Probably the best place to keep potatoes is in a dry, airy granary. Spread them out thinly on the floor. 2. Yes; this is being done by fruit-

growers who are growing apples for export.

OWNERSHIP OF APPLES.

A bought a farm from B, and to have possession the 15th Sept. B is to

THE FARMERS ADVOCATE. Gourlay, Winter & Leeming 188 YONGE STREET, TORONTO.

Easter Offering

Used Organ

them have been used but a few months and are practically new except for the matter of sentiment; the others have come to us in the regular course of business from homes where they were willing to part with very good instruments when making their final choice of a Gourlay or Gerhard Heintzman

repair experts, and an investment in any one will mean a saving of money and a safe outlay, for we guarantee each one.

be sold be fore your order has been received.

TERMS OF SALE

Organs under \$50, \$\$ cash and \$3 per month without interest. Organs over \$50, \$10 cash and \$\$ per month without interest.

If monthly payments are not convenient, please state what method you prefer-quarterly, half-yearly, or at certain fixed dates. We wish to know what terms will suit you.

A discount of ten per cent. off these prices for cash. A stool accom-panies each organ.

Every instrument safely packed without extra charge. We guarantee every instrument, and agree to pay return freight if not satisfactory.

CANADA-5 octave walnut organ by The Canada Organ Co., in neatly decorated case without high top. Has 6 stops, 2 complete sets of reeds, knee swell. Height, when open, 4 feet. Originally \$100. Reduced Price \$31

BELL-5 octave organ by W. Bell & Co., without high top, in neatly decorated walnut case. Has 5 stops, 2 sets of reeds in treble and 1 set in bass, knee swell. Height 3 Originally \$100. Reduced Pfrice \$33

DOMINION-5 octave walnut organ by The Dominion Organ Co., in neatly decorated case with high top. Has 6 stops, 2 sets of reeds in treble and 1 set in bass, knee swell. Height 4 feet. Originally \$100. Reduced Erice \$34

STERLING-5 octave parlor organ by Sterling Co., in neatly decorated solid walnut case with small extended top. Has 9 stops, 2 complete sets of reeds, 2 knee swells. Height 5 feet 3 inches. Originally \$100. Reduced Price \$38

POWELL-5 octave parlor organ by J. Powell, Guelph, in neatly decorated solid wal-nut case with extended top, Has 7 stops, 2 sets of reeds in treble and 1 set in bass, 2 knee swells. Height 6 feet. Originally \$125. Reduced Price \$39

KARN-5 octave parlor organ by W. D. Karn & Co., in handsome solid walnut case with small extended top. Has 7 stops, 2 sets of reeds in treble and 1 set in bass, knee swell. Height 5 feet 10 inches. Originally \$125. Reduced Price \$40

KILGOUE-5 octave parlor organ by Kilgour Co., in neatly decorated solid walnut case with small extended top. Has 9 stops, 2 complete sets of reeds, 2 knee swells, Height 5 feet 6 inches. Originally \$125. Reduced Price \$41

DOMINION-5 octave parlor organ by The Dominion Organ Co., in handsome solid wal-nut case with extended top, Has 8 stops, 2 sets of reeds in treble and 1 set in bass, 2 knee swells. Height 6 feet 3 inches. Originally \$125. Reduced Price \$42

JAMES-5 octave parlor organ by T. James & Co., Guelph, in nicely ornamented solid walnut case with extended top. Has 10 stops, 2 complete sets of reeds, 2 knee swells, mouseproof pedals. Height 6 feet. Originally \$125. Reduced Price \$44

mouseproof pedals. Height 6 feet.
Originally \$125. Heduced Price \$12
BELL-5 octave parlor organ by W. Bell & Co., Guelph, in handsomely deoprated walnut case with high top. Has 11 stops, including couplers, vor humana, etc.; 2 complete sets of reeds, 2 knee swells, meuseproof pedals. Height 6 feet 9 inches.
Originally \$125. Reduced Price \$49
BLACHFORD-5 octave parlor organ by D. Blachford, Toronto, in very handsome walnut case with high top. Has 13 stops, including couplers, etc.; 3 sets of reeds in treble and 3 sets in bass, 2 knee swells. Height 6 ft 10 in. Originally \$125. Reduced Price \$56
DOMUNION: A contave solid walnut error by The Dominion Co. case with extended top.

QUESTIONS AND ANSWERS. Miscellaneous.

505

FEATHER PULLING.

What is the cause of chickens eating feathers off of one another? R. D. Ans .--- This is generally induced by want of meat food. When once contracted it is difficult to cure, and often extends to other members of the flock.

RINGING SOWS.

Will ringing sows, due to farrow in a week, cause abortion ?

Ans .- Not necessarily, if it can be done without undue excitement or worry, but that is not easy to avoid, and we would not advise attempting it under such circumstances.

REMOVING PAINT.

I wish to remove dark brown paint from a door, and stain and grain it oak. How can I get the paint off?

MRS. W. H. B.

Ans .-- Use Gillet's lye and hot water. The first application will start the paint to peel, and will remove considerable if soraped. After the second application, scrub well with a brush. Observe precautions in handling the lye.

NECESSARY DRAINAGE.

Can the trustees of a school section force a drain across an adjoining property to drain the basement of the school? There is a furnace in the basement, and the water rises so as to put the fire out and the school has to be dismissed. J. H. Ont.

Ans.-Yes.

TREATING SMUTTY OATS.

Is formalin, one-half pint to five gallons of water, a good mixture to kill smut on oats and barley? If so, how should it be applied, and how long before seeding ?

2. Would grain so treated be fit for feeding purposes ? W. T.

Ans.-1. See this discussed in our March 17th issue.

2. No, unless mixed with a large amount of other grain untreated.

COLLECTING FOR STALLION SERVICE. A bred his mare to B's horse, and then A sold the mare to C. Can B collect the price of colt from A, if not in foal, as the mare is in the neighborhood yet? Ont. OLD SUBSCRIBER.

Ans .- That depends upon the terms of the agreement between A and B. It is probable that B is in a position to collect from A some amount, but as to how much it is impossible to tell without having particulars of such agreement.

RELATIVE ASSESSMENTS - OUTLET FOR DRAINS.

1. Can I be assessed higher than my neighbors, because I have more fruit trees, a cottage and tenant? 2. If so, how much?

3. I have tile drains running into road

This offering is composed of unusually worthy instruments; some of

Every instrument has been thoroughly examined and adjusted by our

In ordering, state your second and third choices in case the first should

have all that year's crop. B picks the fall apples, and then moves away. B tells C to pick winter apples for his own use. When apples are ready to pick, C goes at them; and A stops him, and forbids C to touch them.

1. Who is entitled to winter apples? 2. If C is entitled, what is the lawful way for C to get pay from A? Ont. A. E. R.

Ans.-1. B and C.

2. To the extent of his gift from B, he should be able to collect by suit for damages against A.

RAISING PIGS-TAINTED MILK.

1. Sow farrowed, and had more pigs than she could raise. Can piglets be successfully raised with the bottle? If so, what is best to feed them ?

2. Farrow cow gives tainfed milk; taint becomes more noticeable after milk stands. Cow has milked twelve months, and is fed bran with slop from house, and clover hay; changed off, and gave her bran, timothy hay and no slop; milk no better. What causes taint?

G. A. H.

Ans.-1. Yes, they can be raised on cows' milk, diluted with water and sweetened. A little patience will be required to get them started to drink, but they are very apt. If necessary, start by spoon feeding, or use a bottle with rutber nipple.

2. Would take it as an indication that it is time to dry her off.

DOMINION-5 octave solid walnut organ by The Dominion Co., case with extended top, nicely carved and panelled and with bevelled mirror. Has 11 stops, 2 sets of reeds in troble, 2 couplers, 2 knee swells, etc. Height 6 feet 1 inch. Used less than six months. Catalogue Price \$200. Now \$58

montas. BELL-6 octave piano case organ by W. Bell & Co., Guelph, in rich walput case with specially handsome mirror, rail top and carved panels. Has 11 stops, including couplers, etc.; 2 complete sets of reeds, knee swells, mouseproof pedals. Height 5 feet 8 inches. Originally \$175. Reduced Price \$79

THOMAS—6 octave piano case organ by The Thomas Organ Co., Woodstock, in hand-some figured walnut case with marquetry design in the panels. Has 11 stops, including couplers and vox humana, 2 co uplete sets of reeds, 2 knee swells, mouseproof pedals. A lovely organ, only slightly used. Originally \$175. Beduced to \$84

A lovely organ, only slightly used. SHERLOCK-MANNING-6 octave plano case organ by Sherlock-Manning, in very handsome figured walnut case (double veneered throughout) of new depign, with full length polished panel and music desk. hand carving and bevelled mirror top. A beautiful organ, excellently finished and perfect in voicing and action. Has 13 stops, 3 complete sets of reads, 2 couplers, 2 knee swells, etc. Cannot be told from new. Height 5 feet 10 inches. Catalogue Price \$300. Now \$91

Height 5 feet 10 incnes.
MASON & HAMLIN-5 octave church organ by Mason & Hamlin, in wathut case with book cupboards, book racks, lamp stands, etc. An extraordinarily fine organ with 14 stops, 7 sets of reeds of 24 octaves each and one set of 1 octave, 2 knee swells and patent exterior swell. Has sufficient volume for good sized auditorium, and tonal variety for solo work that is unsurpassed. Very little used. Cannot be told from new.

Gourlay, Winter & Leeming 188 YONGE STREET, TORONTO. Pat. Oct. 22, 1901 THE VERY FACT that you ride behind all other imple-ments makes walking behind a harrow all the harder. Well, then, why not buy a New Model Harrow Cart, Greatest labor-saver of the 2011 century. Made of all steel, caster where h, fits any harrow. Try one, they are cheap. Agents wanted. Write for further particulars. BOX 787. THE WESTERN IMPLEMENT MFG. CO., LTD., WINNIPEG, MAN.

ditch. Can I compel or is it the council's duty to keep outlet open to the ditch on the road; or could I have a large tile put in bottom of said ditch, and who should pay for same, as it is difficult to keep open where it goes through knolls ? Walkerville, Ont. SUBSCRIBER.

Ans.-1. Yes. 2. It is impossible to give figures; but your property and your neighbors' are legally assessable, respectively, at full actual value. 3. You can hardly look to the council to keep such outlet open; but should, we think, attend to it yourself. There does not appear to be any such duty cast upon them. As to your putting tile at the bottom of the road ditch, we should say that you cannot legally do so without permission from the council, and that, accordingly, you ought to see them and endeavor to make some arrangement of the whole matter.

\$33.00 to the Pacific Coast Via the Chicago-Union Pacific & North-Western Line from Chicago daily during March and April, to San Francisco, Los Angeles, Portland, Seattle, Tacoma, Vancouver and other Pacific Coast points. Very low rates to Helena, Butte, Spokane, Ogden and Salt Lake City. Corresponding low rates from all points. Daily and personally-conducted excursions in Pullman tourist sleeping cars to San Francisco, Los Angeles and Portland, through without change; double berth only \$7.00. Choice of routes. , For particulars address B. H. Bennett, 2 East King St., Toronto, Ont.



EXCELSIOR LIFE

INSURANCE COMPANY.

ASSETS. ONE MILLION DOLLARS Insurance in force over - \$6,000,000

A Company with an unparalleled low death rate,

low expense rate, and earning over 6 per cent. on acests, is a desirable Comrany to insure in and a good Corpany to represent. Agents want d. Lib-eral contracts (fiered good producers. 0

E. MARSHALL, Sec. D. FASKEN, Pres.

WANTED, of good education and ability, in unoccupied territory, to enroll students, at a mini-

mum salary of \$600 a year. Apply, with references.

Canadian Correspondence College, Ltd

MEN AND WOMEN

TORONTO.

HEAD OFFICE,

Insurance in force over

QUESTIONS AND ANSWERS. Veterinary.

506

DISTEMPER

Mare has a lump on each side of her head behind the jaw. The veterinarian said it was distemper, and treated accordingly; said it would break, or have to be lanced in a few days; but this did not occur. Some of my neighbors say it is not distemper. M. S.

Ans.-No doubt your veterinarian was correct in his diagnosis, although his prognosis was at fault. The case is one of irregular strangles or distemper, and in the early stages no person can tell this, hence the mistake your veterinarian made in saying it would break in a few days. These lumps may not suppurate at all, and abscesses may form any place. You, like most people, have very clever neighbors, who know more about horses than any practitioner. They could tell you what this was not, but you do not say that they told you what it was, and how to treat it. You had better allow your veterinarian to continue treatment. If not, blister the lumps with equal parts raw oil, turpentine and spirits of ammonia. Give three drams hyposulphite of soda, or twenty drops carbolic acid twice daily. abscesses form any place, lance, and then treat with a five-per-cent. solution of carbolic acid. It is possible there is puss deep seated in the lumps mentioned.

UNTHRIFFY MARE-INDIGESTION.

1. A year ago a mare, now eleven, refused to eat as much as usual, being previously a good feeder. She will not

THE FARMERS ADVOCATE.

GOSSIP.

Note the advertisement of the annual sales of Dincoln rams to be held Aug. 12th and Sept. 2nd in Lincoln, England, under the auspices of the Lincoln Longwool Sheep Breeders' Association.

Messrs. Wm. Grainger & Son, Londesboro, Ont., breeders of Shorthorns, write: "Our stock is doing well. We are getting some grand calves from our present stock bull, Prince Misty =37864=. We have made the following sales this winter : One bull to M. Ohler, Benmiller, Ont.; one bull to Benj Grainger, Saltford, Ont., and one to Samuel Appleby, Londesboro. These fine young bulls were got by Golden Eagle =30943=. We have two grand young balls left, eleven months old, thick, low-down, soggy fellows, which we are offering at living prices."

TRADE TOPIC.

HARROWS.-If there is one farm implement more than another that has been neglected by the manufacturers it is the harrow. A casual glance at most harrows would leave the impression that they had been perfected years ago, and that no need of improvement had yet been found. This being the case, it is only reasonable that the manufacture. who gives special attention to the work of improving the harrow should fill a long-felt want and command a growing business. Such is the situation with the Blaine Boltless Harrow. They are built without a bolt or bur, are adjustable to different conditions of soil, and are provided with levers by the manipulation of which the harrow can be cleaned. The harrow is worthy the investigation of anyone contemplating buying such an implement. See the advertisement, and be satisfied of the superiority of the Blaine harrow



FOUNDED 1866

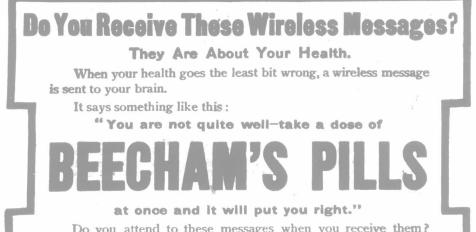
direct from factory. Save agents', dealers' and travelers' expenses. Get you wheels at first cost. We have been established 15 years. Have a first-class line of bicycles, and you can have one or more

at factory cost.

Let us hear from you. We can save you money. Say what style of a wheel you want and we can fill your order. 0

Union Jack Bicycle Works TILLSONBURG, ONT.





Do you attend to these messages when you receive them? You should do so. BEECHAM'S PILLS often prevent a serious illness, and so prove themselves



SECURED BY REAL ESTATE

Incubators Are of the 20th century make, right up to date. Our MOISTURE 50-EGG CYCIE INCUBATOR,

We are offering the best investment on the Market. Absolute security. Particulars free.

8% INCOME

PRICE \$6,



the age. Perfect ventilation We have a 100-egg machine, is the wonder of the age.

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Ayres

now eat more than half a gallon of oats, either whole or chop. Had her teeth examined by a veterinarian, and he said they were all right. She has become quite thin.

2. Mare fifteen years old gets sick occasionally. She lies down, rolls, gets up, looks to her side, groans, etc. In about two hours, she gets all right. She is in season most of the time. Would it do to breed her? J. C.

Ans.-1. I am of the opinion this mare's teeth would be better of being dressed. Have your veterinarian examine again. It is extraordinary, if the mouth of a mare of that age does not require attention, unless the teeth have been previously dressed. To improve the appetite take equal parts, by weight, of sulphate of iron, ginger, gentian and nux vomica. Give her a dessertspoonful night and morning.

2. This mare is evidently predisposed to indigestion, and in order to prevent attacks, very careful feeding is necessary. When changing food do so very gradually. Do not put her to work, or drive for at least an hour after each meal. Give a feed of dampened bran with half a cup linseed meal twice weekly. If she has an attack of illness, give wo drams powdered opium, four ounces extract of belladonna, and two ounces nitrous ether in a pint of cold water as a drench. Constant œstrum redrates ovarian disease, and it is doubtful if she will breed, but it would **BLAINE PATENT BOLTLESS LEVER HARROW** IS THE BEST HARROW ON THE MARKET.

Ask your dealer for a set, and take no other. If he won't supply you, write us and we will fill your order direct from the factory. Prices and particulars on application.

UU., LIMITEO. 48 Richmond Street West, TORONTO, ONT.



84 per 100. Circulars free. **H. GEE & SONS, Selkirk**, Unt.

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agents'. xpenses **st.** We 5 **years**. **bicy**cles, or more

We can nat style l we can 0

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CLEAN

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)4. white oat; grain and ,60c., pust-luded).

brand, n " brand d ' brand. \$2.50 e for your-f address.

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APRIL 7, 1904

GOSSIP.

dam of Jovial Knight, sold in Buenos

Notwithstanding the great drouth ex-

Danville, Quebec, has succeeded in winter-

ing 60 head of registered Ayrshires.

Imp. Napoleon of Auchenbrain.

Ayres for 300 gs.

JOSEPH WILSON.

THE FARMERS ADVOCATE. FARMERS! MARKET YOUR OWN STOCK. Maybee & Wilson LIVE STOCK COMMISSION DEALERS WESTERN OATTLE MARKET ALSO UNION STOCK-YARDS, TORONTO JUNCTION,

All kinds of cattle bought and sold on commission. Farmers' shipments a specialty.

DON'T HESITATE TO WRITE OR WIRE US FOR INFORMA-TION OF MARKET CONDITIONS, or send name and we will mail you our weekly market report.

> References: Bank of Toronto and all acquaintances. Represented in Winnipeg by H.A Mullins, ex-M.P.P.

Address communications Western Cattle Market, Toronto. man Sams and Sams Reas Stream ran mansana FARMER BROWN .- " Never again will I buy woven FARMER JONES .- " Well neighbor try Frost Fence. I have had this fence for many years, and it is as tight fonce or any fence that wraps one wire around unother. to-day as when put up." Hold fast to the

> THE PAGE WIRE FENCE CO. LIMITED Walkerville, Ont. Mentreal, Que. St. John, N.B. Winnipeg, Manu

BRITISH COLUMBIA. "Fruitland," Kamloops, B. C.

perienced in parts of the province last Newly-developed irrigated lands in the beautiful fertile valley of the Thompson River, on the main line of the C. P. R., within half a mile of the Oity of Kamloops, the inland capital of British Columbia, and a well-known health resort. Magnificent soil for fruit of all kinds : Apples, pears, cherries, plums, peaches, grapes, strawberries, and all kinds of vege-tables grown in abundance. Perfect climate ; alr dry and bracing. Good schools, churches, boacing, shooting, fishing, etc. For full information apply to: year, and the great scarcity of water during the winter, Mr. T. D. McCallum,

GOSSIP. A cross-bred ewe belonging to Mr. W. Waugh, Kirkbeckstown, Bewcastle, Scotland, has dropped 18 lambs during the past six years, an average of three per year. She has been able to bring them all up, except one, without any artificial

British Columbia's richest farming district. I publish a real-estate bulle-tin, giving description and prices of some of the best farms in the Valley. Send for one (it will be of value to anyone interested in this country or looking for a chance to better their present conditions) to

SELECT FARMS IN

LOWER FRASER VALLEY





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hens, B. P. alstrain "; persistent f orchard. ngs. Safely ight, Ont.

\$1.50 up; ns, females, and White Buff Wyan)RGE, 5% 0 100

TON CKS ccckerels for ton,Ont. 0

hing from hens, good ties, mated \$2 per 45, Ont.

to champion, heads the herd. He was from a heavy-producing family; his dam having given 72 lbs. of milk per day. Lynda of Burnside, sire Chieftain of Barcheskie, having a record of 60 lbs. of 4 per cent. milk, is a cow full of qual-There are also a pair of Matchless ity. heifers, by an Ogilvie-bred bull, that have a specially nice appearance, and several others that might be mentioned. Suffice it to say, this herd has every appearance of being producers of a high order. Mr. McCallum is also breeding a small flock of Shropshire sheep, and as with Ayrshires, believes the best is none to good. His flock is mostly imported from the leading flocks in England, and he is using a Mansell-bred ram on them, with steady improvement. Mr. Mc-Callum's advertisement runs in the 'Farmer's Advocate.''

A WAR PUZZLE.

THE JAPO-RUSSIAN SITUATION. Can you answer this riddle? "Why are Dunlop Detachable Tires like the Japanese?" The Dunlop Tire Co., Ltd., Foronto, will give ten dollars for the best answer posted to them before April 30th. The company bars out the simple one: "Because they are hard to beat " Can't you think of another reply. Send it on the back of a postal card under your name and address. Remember Dunlop Detachable Bicycle Tires are world-famous. Two hands are the only tools you need in taking them off or putting them on. Advt.

Manager, Canadian Real Properties, Ltd., Box 185, Kamloops, B. C. 0



specks. It is dry, white, flaky-it is all Salt. It is the Salt that is most generally used by the most successful buttermakers. om



Canadian Dairying, BY PROFESSOR HENRY H. DEAN,

of the Ontario Agricultural College. A thoroughly practical book, illustrated ; price, \$1.00, postpaid. William Briggs, 29-33 Richmond St. West, Toronto.

ood whatever, says the Scottish Farmer

At the dispersion sale on March 16th of the small but choice herd of Shorthorns belonging to Mr. Jos. Thorley, at Ringdale, near Faringdon, England, good prices were realized. The four-year-old cow, Collynie Nonpareil, bred by Mr. Duthie, the first offered, brought 90 guineas, while her five-months-old heifer calf sold for 115 guineas. The show helfer, Ringdale Crocus, made 200 guineas, and another two-year-old heifer, Ringdale Musical, brought 220 guineas. The bull, Silver King, was taken at 280 guineas by Mr. Hudson, while Mr. D. McLennan, for the Argentine, took Ringdale Rufus and Ringdale Rival at 135 and 200 guineas respectively. The average for the 35 head sold was £78, or \$390.

At the annual show and sale of bulls under the auspices of the British Hereford Herdbook Society, March 16th, there were 202 entries. The highest price realized was 100 guineas for the second-prize two-year-old hull, Mr. Robinson's Statesman, by Peer, purchased by Mr. Bailey. The first-prize bull in this class, Mr. Rowland's Gaylad, was sold for 36 guineas. The first and second prize aged bulls did not reach the reserve in the ring, but were sold private-There were nearly 150 ly afterwards. yearling bulls shown, and the first-prize winner, Mr. Davies' Diplomat, sold for 70 guineas, and the second-prize bull for 62 guineas.

T. R. PEARSON NEW WESTMINSTER - BRITISH COLUMBIA



Write for particulars as to how to cure it with-out a risky operation. Invaluable advice FREE C. H. Dorenwend, R. S., Toronto, Ont. State your case when writing. 393 Yonge St.



Local agencies and complete repair stocks everywhere

DEERING HARVESTERS

Works at Hamilton, Ont., and Chicago, U. S. A.



TRADE TOPICS.

A stranger last summer visited an Ohio farmer to transact some business.

As he was leaving he pointed to a great sheet of water near the house and said : "What a beautiful lake you have there ! "

"Oh, aye," replied the farmer, "it's beautiful enough, but unfortunately my turnips are below it."

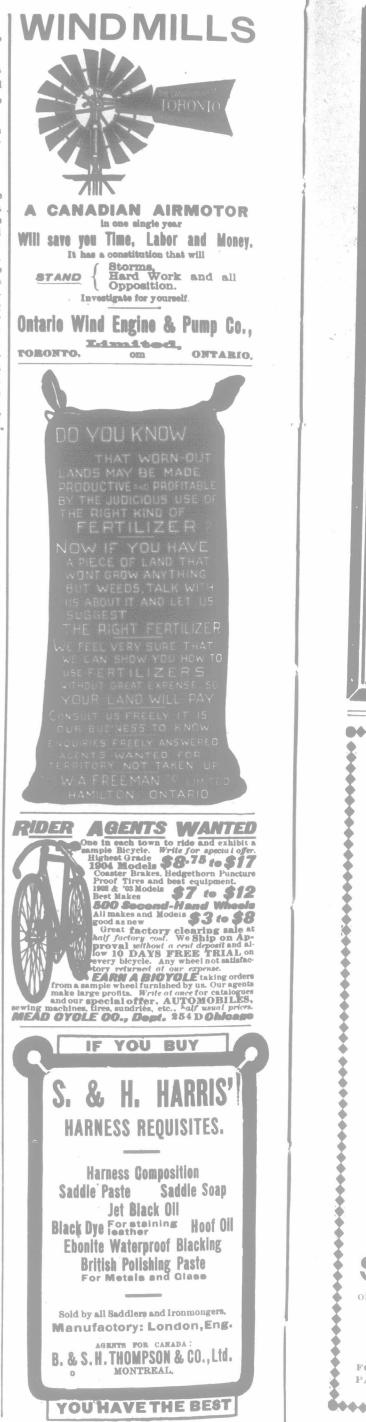
UNION JACK BICYCLES.-In these days of labor scarcity on the farm, a bicycle is an absolute necessity. It is a waste of time to have to hitch up and drive to town for small but useful articles, such as harvesting repairs, etc., when a bicycle can be called into service at a moment's notice. The Union Jack bicycles advertised on another page comprise seven beautiful models, including the chainless, which has roller gear mechanism, thus insuring easy-running qualities. These wheels are not in the trust, and can be depended upon for absolutely reliable service. Their most prominent feature, however, is the fact that they may be bought direct from the factory at first cost; all agents', dealers', and travellers' expenses being saved. If you intend buying a wheel, it will payyou well to investigate the merits of the Union Jack.

THE MCLACHLAN GASOLINE EN-GINES .- These engines are ever increasing in popularity, as is evident from the enormous demand, both for farm and marine purposes. After investigating gasoline engines for years, both in the United States and Canada, the Massey-Harris Co. have selected the McLachlan Gasoline Engine as the most suitable to operate the large threshing machines, where gasoline engines are required, in Manitoba and the Northwest. W. C. Wilcox, their agent in Winnipeg, has just sent in an order to The McLachlan Co. for \$60,000 worth of engines. These engines are the double cylinder, steady impulsive power engines, and are essentially different from the hit-and-miss engines. They give, an absolutely steady speed, and can be regulated to go fast or slow as desired. They are the most economical gasoline engine at present in use. This is owing to the steadiness of power obtained by the double cylinder. This engine is much lighter for the power developed than any other at present manufactured, as their 20-h.-p. engine, mounted, weighs but 3,200 lbs.

LAST MOUNTAIN VALLEY.

Only during the past two years have the people of Eastern Canada begun to realize that west of Lake Superior is fast becoming the Greater Canada. Stories have been told of the great exanse of prairie and the wonde rful fertil-Friends have come back ity of soil. from the vast lone land clad in furs and with pockets well fined with cash, and yet, notwithstanding the truths which they told of the riches of the country and the wealth of opportunities for young men, the chief idea that many retained was that it was mainly a land of ice and snow. It is well, however, that a change has come; happy for Easterners that they have heard of and learned to believe in the country that could cause a wheat blockade. It has been well, too, for the West, because the energetic young farmers of the East are made of the stuff by whose efforts the plains can be made to blossom as the rose. It is with pleasure, therefore, that we call attention to the advertisement on another page of lands in the very heart of this wonderful country-the Last Mountain Valley, in Central Assiniboia. This particular district lies convenient to the capital of the Territories, Regina; is quite easily accessible, is being made more so, and is blessed with all the other natural advantages to be found in a prairie and wooded country. Reference was made to this district in our last issue; in addition we might say two thousand settlers located there last year; but there is still 50,000 acres available for this year's settlement. For other particulers see the advertisement, and write Wm. Pearson & Co., 383 Main St., Winnipeg, Man., who will furnish maps, pamphlets, and all other details. There is also a branch office in Regina, to which application for locations can be made.

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ump Co., ONTABIO.



THE FARMERS ADVOCATE. Only 50,000 Acres for Sale

> THE GEM OF THE SASKATCHEWAN. SITUATION. The Saskatchewan Valley has become famous throughout southern part of this enormous tract of prolific land lies the beautiful Last Mountain Valley, comprising the Strassburg and Longlaketon Districts, which has been truthfully described as "The Garden of the Northwest." It lies between Last Mountain and Last Mountain Lake about twenty five miles north of the Last Mountain and Last Mountain Lake, about twenty-five miles north of the flourishing town of Lumsden, and in consequence of its favorable situation, escapes the early frosts which occasionally visit other parts of the Northwest.

STRASSBURG, ASSINIBOIA,

Wheat Crop Averaged Per Acre: 1902 - 29 bushels 1903 - 25 bushels

ACRE

ON EASY TERMS.

APRIL 7, 1904

PRICE

LOOK INTO THE MATTER.

WM.

"BY THE LAKESIDE."

If You Are Looking for a Home, BUY NOW. For more information and particulars about this district, write

PEARSON CO., 383 Main Street, ASK FOR MAP AND PAMPHLET.

(See Editorial Note on another page.)

ALSO BRANCH AT REGINA, ASSA.



The Canadian Pacific Railway Company have 12,000,000 acres of choice farming lands for sale in Western Canada. Manitoba and Eastern Assiniboia lands generally from \$4 to \$10 per acre, according to quality and location. South-western Assiniboia and Southern Alberta lands, \$3.50 to \$8 per acre. Ranching lands generally \$3.50 to \$4 per acre. Northern Alberta and Saskatchewan lands generally \$6 to \$8 per acre.

509

Excellent Water Good Roads

Ample Rainfall

No Early Frosts

Churches and

Two Railroads.

2,000 SETTLERS LOCATED IN

THE DISTRICT

It will only cost one cent (a postal card) for particulars.

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LAST YEAR.

PRICES WILL BE

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SPRING:

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BEST



Hereford Cattle, Crane Lake, Assiniboia, Main Line Canadian Pacific Bailway.

\$66 LANDS: 160 acres, or one-quarter section, of \$6 lands may be bought for settlement with a cash payment of \$143.80 and nine equal annual instalments of \$120 each, which include interest at 6 per cent. Purchasers who do not undertake to go into residence on the land within one year from date of purchase are required to pay one-sixth balance in five equal annual installments, with interest at the rate of six per cent. per annum.

DISCOUNT FOR CASH: If land is paid for in full at time of purchase a reduction in price will be allowed equal to 10 per cent. on the amount paid in excess of the usual cash installment of one-sixth. Interest of 6 per cent. will be charged on overdue installments.

FOR MAPS AND FULL PARTICULARS APPLY TO

F. T. GRIFFIN, Land Commissioner, WINNIPEG.

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

ENI WICKO SAFETY .

QUESTIONS AND ANSWERS. Veterinary.

510

Bating Became a Dread.

HOW MANY PEOPLE ARE ALMOST AFRAID TO SIT DOWN TO THEIR MEALS ?

YOU MAY BE ONE OF THEM.

IF YOU ARE THERE IS A CURE FOR YOU.

BURDOCK BLOOD

BITTERS

CURES INDIGESTION, DYEPEPELA, BILIOUSNESS, SOUR, WEAK AND

ALL STOMACH TROUBLES.

Mr. J. G. Clunis, Barney's River, N.S., tells of what this wonderful rem-

edy has done for him .-- It is with grati-

tude that I can testify to the wonderful

curative powers of B.B.B. I was so badly

troubled with indigestion that whatever

I ate caused me so much torture that eating became a dread to me. I tried

numerous physicians, but their medicines seemed to make me werse. I thought I

would try B.B.B., so got a bottle, and after taking a few doses felt a lot better.

By the time I had taken the last of two

hottles I was as well as ever, and have

had no return of the trouble since I recommend your medicine to the highest

degree. B.B.B. is for sale at all dealers.

Suit Company, London, Ontario.

MAN WANTED FOR ALBERTA FARM

A thoroughly competent man wanted to take full management of one of the finest farms in

full management of one of the finest farms in Alberta. Applicants must be prepared to in-vest from \$3,000 to \$5 000 in the business. The farm, which is situated 24 miles from an in-corporated town on the C. & E. Ry., is well equipped in horses, machinery, implements and utensils. It consists of 1,100 acres of choice lands; 186 acres in high state of cultivation. 110 acres ready for seed. Hay meadow cuts 150 tons. Comfortable and commodious house, barn, granaties and other buildings. Dairy for 50 cows and piggery for 200 hogs. Plenty of good spring water. Lots of timber for building and fuel. Owner has cleared on this farm \$6,000 in the last 4 years. Must leave it for other interests. A good chance for the right man. None but fully-qualified persons need apply. Address: Opportunity, care of Farmer's Advocate, Winnipeg, Man.

\$2.25 FOR THIS Beautiful \$4

JAPAN TAFFETA SILK

WAIST.

direct from our Waist Fa

tory. Any color or size. Made with large tucks and trimmed with

The same waist

Add 15 cents for

in lustre, \$1.50; volvetcen, \$1.95.

Add 15 cents for postage. Give bust measure. Money refunded if any waist is not satis-

factory. Send this ad. to

Southcott

buttons.

SUPERNUMERARY TEETH.

Colt two years old last fall has two extra center incisors in upper jaw. They are half an inch above the regular row. J. K. M. Ans .-- If the teeth have just appeared,

they are the central permanent teeth, and those existing before, the temporary teeth, should be extracted, and that will allow the new ones to take their proper position. Either pair certainly should be extracted, whichever pair is temporary. You had tetter call your vaterinarian in.

LUXATION OF THE PATELLA.

Two-year-old colt got his stifle out. My veterinarian reduced the luxation and blistered. It still comes out. G. C. Ans.-Keep as quiet as possible, in a comfortable box stall, and blister the joint on the front and inside. You may have to repeat the blister several times. If it persists in coming out, you will need to tie the leg forward by attaching a strap around fetlock, then forward to a collar. Tie so he cannot lie down. In some cases, the foot also requires to be elevated about a foot on a block of wood. About twenty-four hours after blistering, let the foot back to place.

PROUD FLESH, ETC.

1. Horse got cut above fetlock, and there is proud flesh in the wound. 2. How can the growth of horns on calves be prevented ? R. H. M. Ans.-1. Apply butter of antimony once daily with a feather until proud flesh disappears. It is not probable you will need to apply it more than twice. Then dress three times daily with carbolic acid one part, sweet oil twenty parts.

2. At about two weeks old, moisten all around the horn with sweet oil, leaving only the part where the horn is coming through without oil. Take a stick of caustic potash, moisten it, and rub the sprouting horn well with it. V.

CHRONIC MOTOR PARALYSIS.

My horse has a sore and weak back. He staggers when walking, and lifts his fore feet high. Occasionally he is not able to rise without assistance.

J. McA. Ans .- Your horse has a disease of the spinal cord that causes partial paralysis, and it is doubtful whether treatment will be successful, but may result in a cure in time. Keep him as quiet as possible in a large comfortable box stall. Purge him once every three weeks with eight drams aloes and two drams ginger. Give him two drams nux vomica night and morning, except during the action of the purgative. Blister along the spine from the croup to the withers once monthly.

WEAK FOALS AND ABORTION.

Heavy mare produced at three years old. Colt did well. The two following were weak and died at two day I changed sires. First foal did well; next two weak and died. Changed sires again, and she aborted first at seventh month, and second at nine months. Would you advise me to keep on breeding, and if so, do you think it would be well to breed to a Coach sire? F. S. Ans.-From some cause, not understood, some mares produce weak foals. In other cases, it is due to the usage the mare receives during pregnancy. As to abortion, a mare readily acquires the habit. Abortion may be caused by slips, frights, blows, kicks, foul or other odors, etc. When a mare once aborts, she is very liable to do so again. I would advise you to try her again, breed to a healthy, active horse of her own class; nothing will be gained Ly using a sire of another class. As soon as she is stabled in the fall, feed on hay and grain, of first-class quality; be also particular about the quality of the water. Feed sufficient bran and linseed to keep her bowels regular. Do not turn her out with other horses. Give her regular exercise, or light work in harness. When about seven months of gestation has passed, be very careful of her; watch her closely, and if she show symptoms of aborting, give three ounces laudanum every four hours, until she becomes tranquil. Keep close watch over her, until about ten months have passed. I am of the opinion that a little extra care and attention will result in her carrying her foal to full term, and producing



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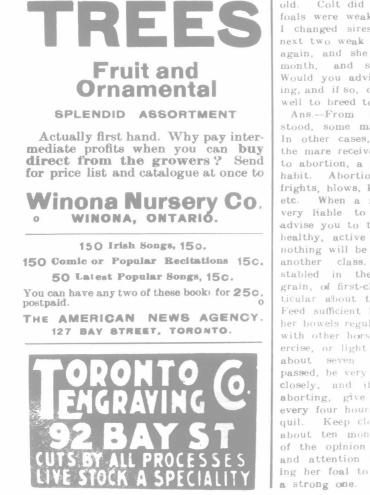
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H J TILLOTSON, M. D., 265 Tillotson Building, 84 Dearborn Street, CHICAGO.

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I.-P. ght 0 lbs APRIL 7, 1904

GOSSIP.

Consider it a blessed privilege if you are able in any small way, to be eyes to the blind, ears to the deaf, or joy to the aged.

The Ayrshire herd belonging to the estate of the late Mr. W. W. Ogilvie, under the able management of Mr. Robt. Hunter, at the Rapids Farm, at Lachine Rapids, Que., quite convenient to the city of Montreal, is looking exceedingly well this spring, having come through the severe winter in excellent form. The herd, numbering at present 85 head, is headed by three superior imported bulls. viz. : Douglasdale, bred by Mr. McKinley, of Hillhouse, Lanarkshire, Scotland, well known as a championship winner at leading shows in Scotland and America, including the Pan-American, and is the sire of many noted winners. Although now in his seventh year, he is still hale and hearty, with every appearance of several years of usefulness in the herd ; Black Prince of Whitehill, bred ty Mr. Robt. Woodburn, of Ayrshire, Scotland, has now to his credit the sweepstakes at both Toronto and Ottawa in 1903, and we expect he will be heard from again this year along the same line. Royal Warrant, rising two years, the junior stock bull, was bred by Robt. Montgomery, of Lessnessock, Scotland, and if the record of his sire and dam count for anything-and judging from the appearance of this chap, we think it certainly does-it is expected that he will give a good account of himself, and his appearance also warrants the expectation. His sire was Rare Style, and his dam Lilly of the Vale of Lessnessock, toth champion winners in Scotland in their day. With three such bulls, as above mentioned, and such a strong string of females as Mr. Ogilvie has in stock, we would be surprised if the offspring was anything tut first-class. The cows here are large, roomy, heavybodied, with well-developed udders and large teats, combining fashionable showyard conformation, and milk and butter production to a very large degree. This firm has not made a specialty of testing, any further than by discarding anything that does not come up to a high standard. Mayflower, an imported cow, has given her owner 75 lbs. of 4.8 per cent. milk in a day, under normal conditions, and she is a very persistent milker, having milked three years without going dry. Several of the old showyard winners that are past that stage are doing excellent service in producing young stock of a high order. Mr. Hunter, the manager, reports trade good, considering the blocked condition of the railroads, etc., and he attributes their success in the matter of sales largely to their advertisement in the "Farmer's Advocate."

The Cream Separator though not the oldest, is the most popular separator in the world to-day. Why? Simply because it is doing better work and giving greater satisfaction than any other can. That's why so many farmers have discarded all others. It will pay you to get the best. Send for our free books on the 'Empire Way'' of dairying. There's good sense in them. Empire Cream Separator Co. 28-30 Wellington St., West, Toronto, Ontario.

BEAUTIFUL FREE 25.00 FOR SELLING you avante an elegant, gold fir Every Watch Guaranteed ur extra Cash Prizes, the 1st hich is \$15.00. Write at once a e will mail you postpaid 20 pack ges of Marvel Washing Blue, th reat washday help, to sell at 1 ants a package. We send hand ome Cold-finished Scarf Pins an some Gold-finished Scarf Fins and Brooches to give away with the Bluing. Every lady needs bluing When sold return us the money, \$2.00 and we will immediately for ward you the watch, and chain and charm Free, also a cash prize varificate. We fake back all you annot sell. Write now. Address, **The Maryan** Watch Dept. 542 | Toronto, Ont

SEEDS Deserve your confidence. They have never falled -- won't fail now. Sold by all dealers. 1004 Seed Annual postpaid, free. D. M. FERRY & CO. Windsor, Ont. -

BUCHANAN'S UNLOADING OUTFIT Works well both on stacks and in barns, unloads all kinds of hay and grain entre. loose or in sheaves. Send for catalogue to M. T. BUCHANAN & CO., Ingersoll, Ont. A larger advertisement appeared last week and another will appear next week.

GOSSIP

THE FARMERS ADVOCATE

Over in the mosquito country an old farmer died, says Lippincott's Magazine. He was reputed to be rich. After his death, however, it was found that he died penniless. His will was very brief It ran as follows:

" In the name of God, amen. There's only one thing I leave. I leave the earth. My relatives have always wanted that. They can have it. Bill L. Indner."

A Western rancher was noted for his mendacity. It was impossible to believe him, impossible to trust him. He got, finally, in the toils of the law, and at his trial he pleaded guilty.

He did well to plead guilty, for the case against him was strong and irrefutable. Nevertheless the jury in its verdict declared him innocent.

The Judge was thunderstruck at this. " Innocent ? " he said. " Innocent ? But the man himself pleads guilty ! " "We know it, your Honcr," said the

foreman of the jury, "but he's such a liar that we can't believe him."

One day a certain professor of mathematics at O. University prepared to set out on a short journey on horseback. He was an absent-minded man, and while saddling the animal was thinking out some intricate problem. Some students stood near and watched him abstractedly place the saddle on hind part before. "Oh, professor !" exclaimed one of the

group, "you are putting the wrong end of your saddle foremost." "Young man," replied the professor,

with some tartness, "you are entirely too smart. How do you know it is wrong when I have not yet told you in which direction I intend to go?

Senator Spooner tells of a lawyer in Wisconsin who had been retained by a farmer to prosecute a suit against a neighbor relative to the title to a strip of land running between their respective farms.

It appears that during a conversation as to the status of the suit the firstmentioned farmer suggested to his attorney that it might be a good idea to send the presiding judge a couple of fine turkeys.

"Dear me ! " exclaimed the counsel, "that would never do, my man ! You would be sure to lose your suit ! "

Nothing more was said on the subject. The case came up, was tried, and judgment was rendered in the plaintiff's favor. When the news was brought to him the farmer expressed his satisfac-tion, adding: "I sent him the turkeys ! "

Too astonished at the man's temerity to say anything, the lawyer merely stared at his client.

"Yes," chuckled the farmer, "I sent him the turkeys, but I sent them in my opponent's name !



The best and cheapest

FOR HOUSE, BARN AND SILO WALLS.

STABLE FLOORS, ETO.

Send for our NEW ILLUS-TRATED CATALOGUE — it tells all Prices and estimates cheerfully given. Write to



Fencing

From Manufacturer to Farmer.

Barbed Wire, per roll of \$2.50

"Hercules" Field Fencing.

4 feet 6 inches high, 32c. to 45c. per rod (161 feet), including heavy double and twisted wire strands, stays, locks, staples. Easily erected; no patent tools. Special discounts on "Hercules" to equalize freight to all parts.

Patent Hollow Steel Posts.

size, 11 x 12 in. x 6 feet 3 in. long; pointed. Wire locks for fastening fencing to posts supplied free. Price per hundred posts, \$35.00.

Don't wait for your neighbor to discover the best place to buy all kinds of fencing. Write at once to





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to Stay n 5 Days y or Pain. d Cure'disease rapidly nstantly. The ss vanishes and nd in its stead

Kidney and M ot be obtained ive a Legal ou or refund for you. My nd no more red. I CAN

will receive in pinion of your oon application 60.

CAUSTIC BALSAM GIVES WONDER-FUL RESULTS.

Berlin, Ont., March 22nd, 1904. The Lawrence - Williams Co., Cleveland, Ohio

Dear Sirs,-I have been using several bottles of Gombault's Caustic Balsam, and found wonderful results. I have been getting it from an agent in Floradale, but now I have moved to Berkin, which makes it rather inconvenient.

Kindly send me full information in regard to agency, as nearly all who once give it a trial want a bottle of it.

Yours truly, M. S. STROME. BOYS FOR FARM HELP

The Managers of Dr. Barnardo's Homes invite ap-The managers of Dr. Barn rules from s in Vite ap-plications from farmers, or others, for the boys who are arriving periodically from England to be placed in this country. The young immigrants are mossly bet $\pi \approx n$ II and 13 years of age; all will have passed through a period of training in Dr. Barnardo's Eng-lish Institutions, and will have been carefully selected with a view to their mome load abuicad with a blitter with a view to their moral and physical suitability for Canadian life. Full particulars as to the terms and conditions upon which the boys are placed may be obtained upon-application to Mr. Alfred B. Owen, Agent Dr. Barnardo's Homes, 214 Farley Ave., Toronto.

•••••••••••••••••••••••••••••••••••• It Speaks for Itself! HEADACHE ð URES 25c. TRADE Guaranteed to Cure within 30 Minutes, or money refunded The Herald Remedy Co., Montreal All Druggists or mailed.

A muscular Irishman recently strolled into the civil service examination room in the city hall where candidates for the police force are put to a physical test. "Strip," ordered Dr. Agnew, police surgeon.

"What's that," answered the uninitiated.

"Get your clothes off; be quick about it," said the doctor.

The Irishman disrobed and permitted the doctor to measure his chest and legs and pound his back.

"Hop over this bar," ordered the doc-

The man did his best, landing on his back.

"Now double up your knees and touch the floor with your hands."

He sprawled, face downward, on the floor. He was indignant, but kept silent.

"Jump under the cold shower," ordered the doctor.

"Sure, that's funny," muttered the applicant.

"Now run around the room ten times to test your heart and wind," directed the doctor.

The candidate rebelled.

"I'll not. I'll stay single."

The doctor looked surprised. "What's more," continued the Irish-

man, "I don't see what all this fussing has got to do with a marriage license." He had strayed into the wrong bureau. Later he got a license, giving the name of Joseph McGlynn.

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

Special Sales of Thoroughbred Stock con-ducted. Consignments solicited. Correspond-ence will receive prompt attention.

This is the best market in Canada for either buyer or seller. Nearly two hundred horses sold each week.

Percherons, Belgians & Hackneys. Hamilton & Hawthorne have recently imported 5 Percherons and 1 Beigian stallion, all first-class young horses, weighing 1,800 lbs. to 2,000 lbs., greys and blacks. These horses are all for sale to private parties or companies on easy terms. All horses guaranteed. Also 3 Hackney stallions. Horses can be seen at stable, Simcoe, Ont. Apply to B. Hamilton, Ridgetown. or o J. Hawthorne, Simcoe, Ont.

OUR LAST IMPORTATION OF CHER



purchasers should see our stock before buying. Address I. A. & E. J. WIGLE,

Box 204, KINGSVILLE, ESSEX CO., ONT.

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THE FARMERS ADVOCATE.

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Fleming's Lump Jaw Cure

Notrouble-rub it on. No risk-your money back if it ever fails. Used for seven years by nearly all the big stockmen. Free Himstrated beek on Lump Jaw and other diseases and blemishes of cattle and horses. Wille for it today.

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

Sore Shoulders sore neck, sore back, &c., result-

sore neck, sore nack, &c., result-ing from collar.saddle or harness gall and chasing, and all forms of canker. callous, &c., are in-stantly relived and cured with

Tuttle's Elixir. Used and endorsed by Adams

Ameness and celle, distemper, lounder, pneumonia, ac. TUTLE'S FAMILY ELIDIR cures rheumatism, sprains, bruises, etc. Kills pain Instantly. Our 100-page book, "Veterinary Experience," FREE. Dr. S. A. TUTTLE, 66 Beverly St., Boston, Mass. Beware of so-called Elizin-mess genuine but Tutile's. Avoid all blisters; they offer only temporary relief if any LUMAN, ENAX & BON, Acanta.

LYMAN, KNOX & SON, Agents, Montreal and Toronto, Canada.

CLYDESDALES **AYRSHIRES** and POULTRY. R. Hess & Sons, Howick, Que. importers of Clyde, Percheron and Hackney stallions, Ayrshire cattle, and poultry, have for sale 5 Clyde stallions, sired by Baron's Pride, Sir Everitt, and Royal Carrick, I Percheron, and I Hack ney, winners. Ayrshires of both sexes, and noultry. -010 **CLYDESDALES** MERTOUN Two choice young stallions and one also one good Shorthorn bull. Prices right. Visitors will be met at Scaforth, G. T. R., on application to D. HILL, STAFFA P.O., ONT. Maple Cliff Dairy and Stock Farm

For sale, Clydesdales : One Clydesdale For sale, Ciydesnales: One Ciydesnales stallion coming three, winner of 1st at Ottawa last fall; two registered mares. Berkshires and Tamworths: Young boars fit for service; young pigs, pairs not akin not akin.

R. REID & CO., Hintonburg, Ont.

COSSIP.

A three-year-old Clydesdale stallion, by the World's Fair champion, McQueen, is advertised for sale by J. H. Millard, Altona, Ont.; Stouffville Station, G. T. R.

Eating horseflesh is increasing among the poor of Paris to such an extent that the abattoirs have to be enlarged. The present consumption is 30,000 horses a year. Horsemeat is darker and stronger than beef, but not unpalatable, and, it is said, sells at half the price of the latter. Surely at such prices, the horses must be old and blemished plugs fattened up for human consumption.

Encouraged by the success of last season's dairy operations, cows, both pure-bred and grade, continued to command high prices. As an example at a recent sale conducted by Mr. Thos. Clark for Mr. J. B. Harris, of Middlesex Co., Ont., prices for grade Holsteins, a very popular cow in Western Ontario, went as high as \$84; ten of them averaging over \$80.

TRADE TOPICS.

GOOD SEED is the all-important essential to successful farming. Seed true to name, free from impurities and vital is the only kind that should be sown. Such seed is advertised by Jas. Hewer, Guelph, Ont. See the many different varieties of wheat, barley, oats and peas he has listed, and if not already supplied with the best, give him a call.

LIVE STOCK .- We desire to draw our readers' attention to the advertisement of Maybee & Wilson, live-stock commission agents, of Toronto. They have had a long experience in the live-stock trade, and are thoroughly conversant in all its branches. They have also the services of Mr. William Crealock, one of the ablest and most experienced of cattle salesmen in Ontario, and their clients can always rely on securing the very best results the market can afford. They have a large connection, both at home and in foreign markets, their orders for Canadian cattle and sheep reaching from British Columbia to the Maritime Provinces, Great Britain, Belgium, also the West India Islands. This places them in a very favorable position to understand the requirements of the trade and conditions of the live-stock markets, and for any information our readers may require at any time, we would advise them to write Messrs. Maybee & Wilson. All communications will receive prompt replies.

DISPERSION SALE OF SHORTHORNS As announced in the advertisement in this issue, the entire herd of 25 registered Shorthorn cattle-18 females and 7 bulls-belonging to Mr. H. S. Fallows, Evelyn, Ont., will be sold by auction on Tuesday, May 3rd, at his farm, 10 miles rom the city of London, and near Thorndale, G. T. R., and Thamesford, C. P. R., stations, where the morning trains will be met on day of sale. A number of the females are descended from the imported cow, Mary Ann 10th, bred by Mr W. S. Marr, Uppermill, Aberdeenshire and sired by the noted Heir of Englishman. The stock bull in use, and included in the sale, is Mina Boy 10th =37980=, of the choice Kinellar Mina tribe, sired by The Baron (imp.) =28880=. Most of the young stock is sired by this bull, and all are of the thick-fleshed, early-maturing type, and as the owner is giving up this farm and intends going into the grazing business on another farm, all will be sold without reserve, besides a few good high-grade Shorthorn females. Further notes regarding this offering may be looked for in our next issue. In the meantime parties interested will do well to make application for the catalogue, giving pedigrees in full, and further particulars.



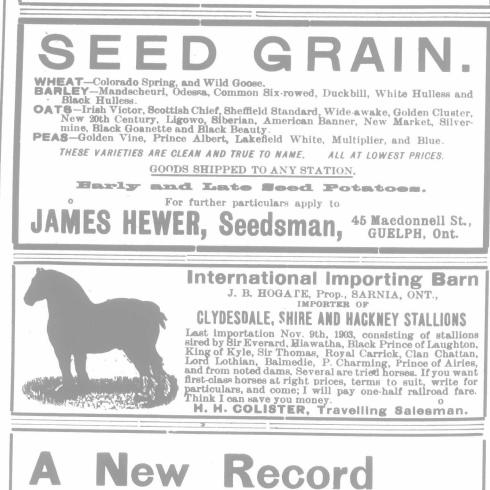


Are made from genuine colors, of great covering power, which are the best preservatives for wood, iron and stone. They will dry quickly with a hard, glossy surface, and will work freely under the brush, and can be applied by anyone.

They are prepared in selected shades, together with outside and inside white and black. Guaranteed to give perfect satisfaction; will not crack, flake or chalk off.

We claim them to be unequalled by any paints in the market for beauty and durability. If you want good, satisfactory work done, be sure that you get our celebrated brands, and do not allow yourselves to be imposed upon by having inferior paints forced on you.

The Canada Paint Company, Limited.



FOR SALE Clydesdale stallion, 3 years old, Lyon Macqueen [3632], sire Mac-queen (imp.) [462] 3513 (5200), dam Blossom (imp.) [361], by Lord Lyon (489); 2nd dam Rose of Inch (3800), by Warrior (902); 3rd dam Jess of Eld-ridge (1603), by Clyde (1621); 4th dam Maggie of Challoch, by Lochend Champion (448). J. H. HILLARD, Altona, Stouffville Sta., G.T.B.

THOROUGHBRED STALLION. For Sale: GOVERNOR GRIGG No. 519, champion hurdle horse of America at 14 miles and 14 miles, 168 lbs, up and 167 lbs. For par-ticulars addres DR. G. J. FITZGERALD, V. S., London, Ont. V. S., London, Ont.



Registered mares, from three years old and upwards, for sale.

NELSON WAGG. Claremont station, C. P. R., 2 miles. Stonifville station, G. T. R., 4 miles. -0m



5

YOUR PLASTER CEIL-ING is Tumbling Down

And lets the heat out and the cold in and looks unsight-by Why soft cover, with one of our handsome Metal Cethings which gas a right over the plaster t. Their cost is small. Solid cateful size and diagram of room for first estimates and diagram.

The Metal Shingle & Siding Co., Limited PRESTON, ONT.

\$50 to California and Return

Via The Chicago, Union Pacific & North-Western Line, from Chicago, April 23 to May 1. Choice of routes going and returning. . Correspondingly low rates from all points. Two trains a day from Chicago through without change. Daily and personally conducted tourist car excursions. Write for itinerary and full particulars regarding special train leaving Chicago April 26. B. H. Bennett, 2 East King St., Toronto, Ont.

For draft geldings of any breed was made in the Chicago Auction Market on March 23rd last, when a high-grade Clydesdale Gelding was sold for \$665 to Messrs. Armour & Co.

We are the oldest and largest importers of

Clydesdales

in America, and are now offering extraordinary bargains in this breed, and also in **PERCHERONS**, SHIRES, SUFFOLKS, HACKNEYS and GERMAN COACHERS.

ALEX. GALBRAITH & SON,

JANESVILLE, WIS. BRANDON, MAN.

If your district is not supplied with a good stallion, write at once to MR. JAMES SMITH, Manager Manitoba Branch.

APRHL 7, 1904

THE FARMERS ADVOCATE. TRUMAN'S

COSSIP

Two young Clydesdale stallions and a filly are advertised for sale in this issue by Mr. D. Hill, Staffa, Ont.; sired by Imp. Pride of Glasnick, by Garnet Cross; dams by His Lordship (imp.) [1925] and Home Secretary (imp.) (5875). These are of excellent breeding, and are said to be choice individuals.

Twenty imported Clydesdale fillies, the property of Douglas H. Grand, of Trevathan, Beckenham, Kent, England, were sold at Walter Harland Smith's Repository, Toronto, on March 30th. The total receipts of the sale were \$4,625; or an average of \$231 each; the top price, \$380, being paid by Mr. W. J. Hazlitt, of Jarvis, for Gipsy Jane, a two-year-old filly of superior breeding. The other purchasers were : Lady Brown, \$190, John Boag, Ravenshoe; Love Knot, \$180, R. Cundle, Barrie; Blossom, \$245, T. Hobson, Richmond; Dark Queen, John Bright, Myrtle, Royal Rosie, \$300, James Paton, Swinton Park; Queen of Milton, \$285, John Bright ; Maid of Charlesfield, \$265, John Bright; Black Belle, \$185, John S. Johnson, Ravenshoe; Sarah Grand, \$250, Colonel McGillivray, Stouffville; Crown Gem, \$185, G. A. Brodie, Bethesda; Brown Beauty, \$170, Wm. Harris, Toronto; Lady Paterson, \$295, John G. Stewart, Springbank; Craigend Lily, \$185, T. Howden, Milton; Lady Ronald, \$250, D. H. McCaugherty, Streetsville; Sturdy Queen, \$190, T. Howden; Kate Lauder, \$200, Colonel McGillivray; Lady Muirside, \$310, Wm. Harris, Toronto; Jewel, \$310, John Gildner, Berlin; Lady Crawford, \$185, Wm. Harris.

M. Curie, the discoverer of radium, laughs at the fads that seize upon physicians from time to time. He spoke recently about the tar-water fad-a thing

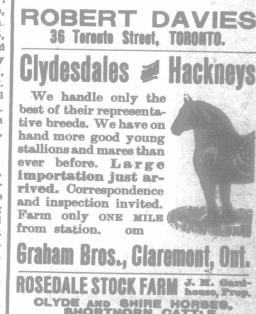


513

The safest, Best BLISTER ever used. Takes The safest, Best BLISTER ever used. Takes the place of all inaments for mild or severe action. Bemoves all Bunches or Blemishes from Horrses and Cattle, SUPERSEDES ALL CAUTERY OR FIRING, Impossible to produce sour or Memiah Every bottle sold is warranted to give satisfaction Price \$1.80 per bottle, Sold by druggists, or sent by express, charges paid, with full directions for its us. Send for descriptive circulars. The Lewrence-Williams Co., Toronto, Ont



THORNCLIFFE STOCK FARM has for sale a carload of Clydesdale stallions and mares, including prize-winners. Some of the mares are in foal to the justly-celebrated stallion, "Lyon MacGregor." For prices, etc., etc., apply to om







INTERNATIONAL WINNERS.

CHAMPION STUD.

SHIRE, PERCHERON, BELGIAN, SUFFOLK AND HACKNEY STALLIONS.

Seven importations within the past twelve months. More select prizewinning Shire stallions than all our competitors. Seven stallions sired by the 1904 London champion, Blaisdon Conqueror, for sale. Twenty-six years importing Shire stallions.

We have opened a

BRANCH STABLE at LONDON, ONT., for the convenience of our Canadian customers.

Will charge no more for our first-class stallions than others are doing for common stock. Write for new catalogue.



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GOSSIP.

Attention is again directed to the advertisement in this paper of the dispersion auction sale of the entire herd of Ayrshire cattle belonging to Mr. D. A. Macfarlane, Kelso, Que., on Wednesday, April 13th. Ten grade females will also be sold. The R. R. stations are: Carr's Station, G. T. R., and Athelstan, N. Y. C. A rare opportunity to get good dairy stock.

The high-class Thoroughbred stallion, Gov. Grigg 519, is advertised for sale in this paper by Dr. G. J. Fitzgerald, V. S., London, Ont. This horse has an excellent record as a sire of the goodselling type of hunters and saddlers, is kind, gentle, sure and satisfactory in every way, and the only reason for selling is the impossibility of getting a suitable groom to handle him. Parties interested will do well to write for particulars as to breeding, record, etc.

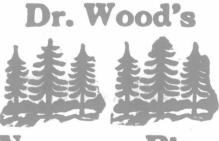
The young Guernsey bull, Pong of Dentonia, advertised for sale in this paper by the Rathbun Company, Desoronto, Ont., should prove a good investment to anyone who wants to breed show animals that are performers. His sire, lsland Heirloom of Dentonia, won first at the Royal in England, as a calf; first at the Pan-American, and first and sweepstakes wherever shown since that time. His dam is a show cow, and a good performer. Mr. J. B. Davidson, farm superintendent, writes : "I shall be glad to have anyone inspect this bull, or give any information I can to any person in need of such a bull."

Hampshire Down sheep, a breed greatly prized in England for the weight and quality of their mutton, for raising early lambs, and for crossing with other breeds to produce large, good selling lambs, are advertised in this paper for the Hampshire Sheep Breeders' Association, by the Secretary, Mr. James E. Rawlence, Salisbury, England, who will supply in-formation regarding the breed and the breeders in that country. Hampshires do well in Canada, as has been amply proven by the few breeders who have them, and they have won high honors at the great fat-stock shows of Great Britain.

The following is a summary of the official records of Holstein-Friesian cows that have been approved from March 15th to March 24th, a period of nine days; made under careful supervision of agricultural experiment stations, and the butter estimated on the basis of 85.7 per cent. of a pound of fat to a pound of finished butter, the rule of the American Association of Agricultural Colleges and Experiment Stations.

During this period 43

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Norway Pine Syrup

Cures Coughs, Colds, Bronchit's, Hearseness, Croup, Asthma, Pain or Tightness in the Chest, Etc.

It stops that tickling in the throat, is pleasant to take and soothing and heal-ing to the lungs. Mr. E. Bishop Brand, the well-known Galt gardener, writes:--I had a very severe attack of sore throat and tightness in the chest. Some times when I wanted to cough and could not I would almost choke to death. My wife got me a bottle of DR. WOOD' NORWAY PINE SYRUP, and to my sur-prise I found speedy relief. I would prise I found speedy relief. I would not be without it if it cost \$1.00 a bebtle, and I can recommend it to everyons bothered with a cough or cold.

Price 25 Cents.



The long and cold winter has necessitated feeding larger quantities of grain, etc., than usual. The best means of making what you have left go double as far is to feed

Worthington's Canadian Stock Tonic. 10-LB. BOX, 50C. 50-LB, SACK, \$2. Manufactured only by the Worthington Drug Co., Agricultural Chemists, Guelph, Ont.

has taken us 62 years to perfect Ramsay's Paints-to mix each shade so that it paints easily and smoothly-holds its fresh, bright color without fading, cracking or peeling. This 62 years' experience goes with every can of Ramsay's Paints-and costs nothing extra.

Our booklet tells some paint facts worth knowing. It's free. Drop postal for a copy

A. RAMSAY & SON, Paint Makers since 1842, MONTREAL,



press Office and if found perfectly satisfactory, exactly as represented A GENUINE EAGLE BICYCLE, NIGH GRADE, 1904 MODEL-pay to the Express Agent the balance due—\$20,00—and Express Agent the balance due—\$20,00—and Express Bicycles. EVERYONE KNOWS THE EAGLE BICYCLE. They are Highest Grade wheels made; big favourites with best Bicycle Clubs; the leading wheel with professional riders. Built on honor, dush joints, finest hanger, hubs and bearings, highest grade equipment. Fitted with Dunlop double Tube Tirres. Heights of frame—Men's 20, 22 and 24'in.—Ladies' 20 and 22 in.—teamelled Black. WB OFFER splendid chance to a good agent in each town. Send for catalogue and ask for Agents' Discrement. Wheels slightly used, \$8.00 to \$25.60. Secure Agency at once.

T. W. BOYD & SON, 1683 Notre Dame St., MONTREAL

records, 4 fourteen-day records and 5 thirty-day records have been registered. The largest seven-day record was of a full-age cow, at 22 lbs., 18.2 ozs. butter. Her test was continued thirty days, and resulted in the production of 2,152.7 lbs. milk, containing 77.038 lts. butter-fat, equivalent to 89 lbs. 14 ozs. butter, a trifle less than three pounds a day. Another full-age cow produced in thirty days 1,897 lbs. milk, containing 72.198 lbs. butter-fat, equivalent to 84 lbs. 3.7 ozs. butter. A four-year-old in the same length of time produced 1,654.4 lbs. milk, containing 64.905 lbs. fat, equivalent to 75 lbs. 11.6 ozs. butter; and a three-year-old made a record in thirty days of 1,676.2 lbs. milk, 56.271 lbs. fat, and 65 lbs. 10.4 ozs. Lutter. Of the seven-day records, 14 full-age cows averaged : age, 7 years 7 months 6 days; days from calving, 38; milk; 435.3 lbs.; butter-fat, 15.169 lbs.; equivalent butter, 17 lbs. 11.2 ozs. Three four-year-olds averaged : age, 4 years 4 months 17 days; days from calving 35; milk, 370.9 lbs.; butter-fat, 13.871 lbs.; equivalent butter, 16 lbs. 3 ozs. Eleven three-year-olds averaged : age 3 years 5 months 25 days; days from calving, 30; milk, 382.4 lbs.; butter-fat, 12.959 lbs.; equivalent tutter, 15 lbs. 1.9 ozs. Fifteen classed as twoyear-olds averaged : age 2 years 4 months 2 days; days from calving 43; milk, 296.4 lbs.; butter-fat 9.804 lbs.; equivalent butter, 11 lbs. 7 ozs.-S. Hoxie, Supt. of Advanced Registry.

THE SUNNYSIDE HEREFORDS



D. Freest Coleman OAKDALE FARM, · COOKSTOWN, O COOKSTOWN, ONT. TWEEDHILL ABERDEEN-ANGUS Four bulls 10 to 14 months, also one 2 years. Good individuals; registered in American Herdbook. JAMES SHARP, O ROCKSIDE, ONT. CHELTENHAM STA., C. P.R. &G.T.R.

FOR SALE: THE GUERNSEY BULL, PONG OF DENTONIA 8091 Sired by Imp. Island Heirloom of Den-tonia 7324, and out of Imp. Honesty of Dentonia 13848. Dropped April 15, 1902. Sure and right in every way. For particulars write o

JAS. B. DAVIDSON

SUPT. RATHBUN COMPANY FARM. DESERONTO, ONT.

ZENOLEUM

Famous COAL-TAR Garbolic Dip. For general use on live-stock. Send for "Piggies rouples" and "Zenoleum Veterinary Advisor" ind learn its uses and what prominent stockmen ay about it. Books mailed free. All druggiste, or ne gal, express paid, \$1.50;5 gal., freight paid, \$0.25. EMMER DISINFERTANT CO. 445 B. 1997 Troubles' and "Zenoleum Veterinary Ad ZENNER DISINFECTANT CO. 113 Bates St , Detroit, Mich.

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KEL ASH Sicam smooth-strongly ; bright nuot ex-ve,s can ve,s can ve,s can i Lengine, . Sen d address, nail you, packages which address, sell at 10 age. We me Gold vrf Pins sto give coume a for our rize, the coume is

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The curtain has just risen upon a history-making scene in the far East The eyes of the world are fixed upon it with breathless expectation. May Japan win in her brave struggle and secure a **National Triumph** Peace has its victories as well as war. Here, in the far west, our "National" vic-tories have carried all before them, and given to the NATIONAL CREAM SEPARATOR a supremacy which no rival can approach.

STTLE "B"-Capacity 250 lbs, per hour, No. 1 -330 to 350 lbs. per hour, No. 1 A-450 to 500 lbs. per hour,

APRIL 7, 1904

Send for Catalogue and Prices to The Creamery Supply Co., Guelph, for Southern and Western Ontario. The T. C. Rogers Co., Guelph, for Northern and Hastern Ontario.

Jos. A. Merrick, Winnipeg, Manitoba, for Manitoba, N. W. T. and B. C. H. E. Nunn, Truro, N. S., for Maritime Provinces; or to the well-known manufacturers

The Raymond Manufacturing Company of Guelph, Ltd., 0

NATIONAL.

Local agencies and complete repair stocks everywhere

THE FARMERS ADVOCATE.

GOSSIP.

We would again remind our readers of the postponed auction sale of the entire herd of Shorthorns-30 head- belonging to Mr. Colin Campbell, Crosshill, Ont., Newton Station on Port Dover and Wiartom branch, G. T. R., on Tuesday, April 12th. Some of the best females have calves at foot, by the \$700 bull, Nonpareil Archer. The sale was postponed from March 25th, owing to the

advertise Clydesdales and Hackneys in this paper, have had long and large experience in breeding and importing, and C. P. R., 30 miles east of Toronto.

The Farnham Farm flock of Oxford sheep, property of Mr. Henry Arkell, of Arkell, Ont., near Guelph, numbers at present over 250 head, and is headed by seven imported rams, among them being such noted sires as Bryan 125 21467, well known to the Oxford fraternity; Vanity 29093; Hampton Hero, and other prizewinners. There are about 30 imported ewes in the flock, from the noted flocks of Hobbs, Brassey, W. Arkell, Adams and Treadwell, and a bunch of ewe lambs from Reading's The young lambs are coming flock. thick and fast; perhaps more twins and triplets than desired. Mr. Arkell exhibited at four of the leading exhibitions last fall, after being out of the showring for several years, and secured 40 firsts, 25 seconds, 15 thirds, and 6 championships, as well as all the pen prizes, which speaks well for the quality of this flock. There are between 40 and 50 rams in stock, sired by the noted stock ram, Bryan 125, affording a real good chance for intending purchasers to select from. Mr. Arkell expects to show at several of the leading exhibitions, including the St. Louis World's Fair. He intends to import some of the best he can get, which, along with the excellent stuff that is already in stock, ought to make a very strong showing. Mr. Arkell also has one of the oldest established herds of Shorthorns, being founded by his father, from importations many years ago. They have four top crosses of Scotch sires. Harry Nonpareil, a smooth, thick, evenly-fleshed, straight Nonpareil bull, heads the herd. There are a bunch of nicely - finished young things by him. Among the lot is five young bulls worthy of inspection.

THOROLD CEMENT AND **PORTLAND CEMENT** FOR BARN WALLS AND FLOORS, HOUSES, SILOS, PIGPENS, HENHOUSES; AND SEWERS, TILE, ABUTMENTS AND FIERS, 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. SHORTHORN BULLS FOR SALE Some ready for service, young, and bred from imported and Canadian stock; also a number of heifers and cows, Dorset sheep and Yorkchire swine for sale. D. BARTLETT & SONS, Smithville P. O. and Station, Ont. 0 Shorthorns and LEICESTERS. Present heifers of the best Scotch families. Also a number of Leicesters of both sexes now for sale at reasonable prices. Address of Leicester UI DUM Solution prices. Address W. A. DOUGLAS, Tuscarora P. O., Ont, Station—Caledonia, Ont, **GEDARDALE FARM.** For Sale, three young old to two years. All good standard reds and from first-class stock. "Gloucesters" and "Lord George" stock. Also three cows in calf, and three heifers, from one to two years old, two of them in calf. "Trilby," "Beauty" and "Flora" dams, DR. T. S. SPROULE, Markdale, Ont., P. O. and Station. 0

515

WILLOW BANK STOCK FARM Established 1855.

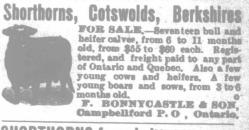
SHORTHORNS AND LEICESTERS A grand lot of young stock for sale, rich in the blood of Scotch Booth and Bates families Rosicrucian of Dalmeny 45220 (imp.) at head of herd. We breed the best to the best Leicester sheep of rare breeding and quality. Address:

JAS. DOUGLASS, Proprietor, P. O. and station, Caledonia, 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.



SHORTHORNS for sale IMPORTED AND Cows, Heifers and young bulls, Finest quality Scotch breeding. Prices low. o W. DOHERTY, Glen Park Farm, Clinton, Ont.

Works at Hamilton, Ont., and Chicago, U. S. A. TO BOYS RHEL Dalay Repeating Win 0 Dur new Model Air Rifle is a fi ester Action Rifle ue steel barrel Gun with sights c.,complete, shoots shot, darts an ugs with great force and accuracy oots 1000 shots with 0 out reloading. " AND \mathbf{O} \$25.00 0



condition of the roads. Graham Bros., Claremont, Ont., who

are acknowledged to be first-class judges and handlers of horses, and their record as prizewinners at national and international exhibitions stands unsurpassed in their classes. They have a new importation of high-class Clydes and Hackneys, and invite correspondence, or inspection at their stables at Claremont,



auction without reserve, the owner having given up his farm. There are included over 20 cows, most of which are due to freshen next month, and a half dozen young bulls, besides the imported three-year-old bull in use at head of the **h**ree herd, and also a bunch of heifer calves. The location is some 20 miles from Hamilton, Ont. Note the advertisement and remember the date.

A Home Cure for Cancer.

IMPORTANT HOLSTEIN SALE.

On Tuesday, May 3rd, as intimated in

the advertisement on another page, the entire herd of 40 head of registered Holstein cattle, belonging to Mr. D. Jones,

Jr., Villa Nova, Ont., will be sold by

Thousands of dollars have been spent and years of labor exerted to discover the cause and perfect a cure for that terrible disease, cancer. The cause is only interesting from a scientific standpoint, and from the fact that it might lead to discovery of a cure. The cure is a vital problem. Success has attended the efforts so far of but one concern, the Dr. D. M. Bye Co. These eminent specialists have perfected a Combination of Oils which have wonderful effects on diseased tissue, leaving unharmed the sound. The Oils are mild and safe, and can be used at home in most cases. Don't trifle with death. Write at once for free books, giving particulars. Address Dr. D. M. Bye Co., Drawer 505, Indianapolis, Ind.

SCOTCH SHORTHORNS Twelve blocky, sappy young bulls, 10 to 14 months old, reds and roans, sired by the Princess Royal hull, Imp. Prince of the Forest =404(9=, and out of high-class Sootch and Scotch-topped cows. Also ten thick-fieshed heifers, in calf to Imp. Prince of the Forest, placed at head of herd at cost of \$650 Come and me or write for prices

Come and see, or write for prices. J. & B. OHINNICK, Chatham, Ont.

FLETCHER'S SHORTHORNS

Comprise Cruickshanks, Orange Blossoms, Nonpa-reils, Crimson Flowers, Mysics, Languishes, Butter-files and Jessamines, and are headed by the noted Duthie-bred bull, (Imp.) Joy of Morning (76929), win-ner of 1st prize at Toronto Exhibition, 1903. Several choice heifers and young cows bred to Joy of Morn-ing, also bull calves suitable for herd headers, for sale. GEORGE D. FLETCHER. Erin Shipping Sta., C.P.R. o Binkham P.O.



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

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Horse Sense

FOUNDED 1866

QUESTIONS AND ANSWERS. Veterinary.

516

GEDEMA AND SCRATCHES Aged mare, in good condition and working, is swollen under the abdomen Her hind legs are also swollen, and heels cracked. H. H. Ans .-- Feed bran, only, for eighteen hours, then give a purgative of eight drams aloes, two drams ginger. Feed bran only, and give a little water at a time for twenty-four hours. Follow up with one ounce Fowler's solution of arsenic night and morning for ten days. Cease for one week, and repeat, etc. Poultice the cracks with linseed and charcoal for two days and nights (do not wash), then dress several times daily with sugar of lead, one ounce; sulphate of zinc, one ounce; water, one part. Give regular exercise, and do not feed heavily on grain. The condition is caused by high feeding, and an alteration in the condition of the blood.

Miscellaneous.

GRAFTING-PLANTING-CEMENT BUILDING BLOCKS.

1. Would you consider it advisable to top-graft a miscellaneous assortment of fall apples with Spy, Greening and Baldwins?

2. How far apart should spruce for a windbreak be set in a single row?

3. Is there any difference in feeding value of: (a) White and yellow corn; (b) Indian or flint corn, and dent corn ?

4. A company here is formed for making cement blocks for building houses. They are about 32 inches long, 10 inches high, 9 inches wide, with a 2-inch dead air space. Do you know how they would be for the purpose, being set in cement of course, or could any of your readers give any information ?

M. A. G. Ans.-1. Yes, provided the trees were hardy, and the proper distance apart.

2. Spruce will spread and fill the space if they are twenty feet apart; but the closer they are together, of course, the sooner the windbreak is formed. We would not set closer than ten feet, nor wider than twenty. If the windbreak is wanted at once, it might be well to set close, and then thin out later on.

3. (a and b) No. chemical analysis show these to be all alike.

4. These blocks are coming into quite general use. The new dairy building on the Toronto Exhibition Grounds is made of this material. Defects in the making of these blocks are possible, and that is the feature to be guarded against. There is no doubt of their durability, if well made

SNOWBIRDS-BARLEY.

1. Does the snowbird change its color, and remain with us the year round? If not, where do they go to for hatching and rearing their young?

2. How does beardless barley compare with any of the bearded varieties, as regards the yield per acre and feeding

DR. HESS Stock Book Free A treatise on the diseases of stock

A treatise on the diseases of stoci and poultry, written by Dr. Hess (M. D., D. V. S.), sent free to any address on receipt of answers to the following questions: How much stock have you (number of head of each kind)? What stock food have you used? Men-

food naveyou user: Men-tion this paper. Prof. W. S. Goss, Dean of Talladega (Ala.) Cole-lege says of it: "I think Dr. Hess Book a little gem. I shall keep it near me for reference."

possesses wonderful tonic properties that revive all the vital organs, increasing the appetite, strengthening the digestive power, so that wonderful and lasting systemic strength is established. Gives rapid growth to horses, cattle, hogs and sheep; makes them immune from disease.

tonic.

Dr. Hess Stock Food is sold on a written guarantee, 100 lbs. for \$7.00; smaller quan-tities at slight advance. Fed in small dese.

It is horse sense to keep your horse's condition at the best by feeding Dr. Hess Stock Food, the great horse

hard service; purifies the blood; improves the coat; removes dropsical swellings and stocking of the leg; prevents cracked or greased heel; expels worms, cures

distemper, indigestion, constipation, scratches and is a tonic to the organs of reproduction. Dr. Hess Stock Food is especially good for mares in foal and for grow-

ing colts-as well as for fattening horses for market.

It is called a food for want of a better name; but in

reality it is a doctor's prescription for producing the results desired. It is the only stock food made by a graduate of both veterinary and medical colleges; the

only stock food endorsed by them and used by successful

practitioners. No unprofessional manufacturer can equal it.

HESS

Given in tablespoon doses, it fits a horse for

Information Bureau.—For any disease or condition for which Dr. Hess Stock Food is not recommended, a little yellow card enclosed in every package entitles you to a letter of advice and a special prescrip-tion from Dr. Hess (M. D., D. V. S.) In this manner you are provided with a universal treatment for all stock diseases, either in the Stock Food itself or in the special prescription to which the little yellow card entitles you. Indorsements from physicians, scientists and stock feeders furnished on application.

DR. HESS & CLARK, Ashland, Ohio, U. S. A. Also manufacturers of Dr. Hess Poultry Pan-a-ce-a and Dr. Hess Healing Powder





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F. MAH

value ? Does it require more seed per acre than the bearded kinds ?

Ans.-1. By snowbird we presume you mean the junco or slaty-colored snowbird. which is, perhaps, the most common variety of the species. Regarding this bird, whose migrations occur in April and September, Mr. Neltje Blanchan, a well-known authority, says · 1 16 W come forth in September, migrating at night from the deep woods of the North, where they have nested and moulted during the summer; but not until frost has sharpened the air are large numbers of them seen." Then, "starved into familiarity . . . when the snow has buried seed and berries the snowbirds appear about the haunts of men. Rejoicing in winter, they, nevertheless, do not revel in the deep and fierce Arctic blasts but take care to avoid the open pastures before the hard storms overtake them." This latter statement probably answers our correspondent's query, as to the intermittence with which flocks of these birds appear.

2. Our experience with beardless barley was not very encouraging. The first year we grew it on root land and had a very heavy crop: but the straw was weak, and the grain shelled off badly. The next year we put it on land not quite so rich, but it grew very poorlythin, short and uneven. Others have reported similarly. It has less hull than the bearded barley; consequently, it is a little better for feeding. Between a bushel and a hushel and a half per acre is enough seed.

APRIL 7, 1904

Was all Crippled

Could Scarcely Walk, But the

DR. CHASE'S

KIDNEY-LIVER PILLS.

The kidneys, after all, are responsible

for rheumatism as well as most of the

other pains and aches of the body, and lasting cure can only be obtained when

Dr. Chase's Kidney-Liver Pills are the

most popular and successful kidney medi-

cine of the day, because they act prompt-

Mr. Charles Morrish, Dorchester Sta-

tion, Middlesex County, Ont., writes :

"I desire to acknowledge to you the

benefit I have received from Dr. Chase's

Kidney-Liver Pills. For about twelve

months I could hardly walk, on account

of being so crippled up with kidney de-

"I had tried many medicines without

benefit, and hearing of many being cured

by using Dr. Chase's Kidney-Liver Pills,

I made up my mind to give them a trial.

After having taken six boxes of this

medicine in succession, I can truly say

that I am in better health to-day than I

have been for twenty years. The rheu-

matism pains have entirely disappeared,

and I am well and hearty. As I am

nearly seventy years of age, I consider

my cure remarkable, and give all credit

Dr. Chase's Kidney-Liver Pills, one

pill a dose, 25c. a box, at all dealers, or

Edmanson, Bates & Co., Toronto. To

protect you against imitations, the por-

trait and signature of Dr. A. W. Chase,

the famous recipe-book author, are on

SHORTHORNS AND SHBOPSHIRES.

DOMINION

WANTED.

every box.

to Dr. Chase's Kidney-Liver Pills."

the kidneys are set right.

ly, and are of lasting benefit.

rangement and rheumatism.

Disappeared, Thanks to

Pains and Aches Have Entirely

THE FARMERS ADVOCATE.

QUESTIONS AND ANSWERS. Miscellaneous. With Rheumatism

DRIVEN WELLS.

I would like to have your opinion as to whether a driven well can work satisfactorily where it has a quicksand bottom ? W. L. M. New York.

Ans.-Will some of our readers state the conditions under which water is secured satisfactorily in driven wells.

SELLING MIXED GRAIN.

Last spring I sowed a mixture of 15 bushels of oats and 10 bushels of goose wheat, and it turned out a good crop. Parties are now wanting it for seed. How much should I sell it for a bushel, or a hundredweight? Grain in this part being worth 33c. per bushel for oats, and 90c. for wheat G. W. Lambton Co.

Ans .- Assuming that the grain grew in the same proportions as the mixture sown, it would be worth about 56c. per bushel; but good seed usually commands a better price than grain for feeding purposes.

BABY BEEF.

1. Would you advise an average farmer to sell his grade Durham cows, and buy, say ten head of Polled Angus heifers, and cross with a good Shorthorn bull to raise baby beef?

2. Would it be better to tie cows up in stalls and let calves to them, or put cows and calves in box stalls?

3. Would it be better to keep calves in pens first summer, or let run with cows ? W. H. L.

Ans.-1. No. We would rather advise the use of a short-legged, thick-fleshed, blocky Shorthorn bull on the cows you have, as from these you can raise steers that at two and a half years should weigh 1,400 lbs., good enough for shippers or exporters and as good baby beef as by the other process.

2. There would be economy of stable room in the system of tying the cows and having the calves in box stalls, letting them to the cows three times a day for the first two weeks, and then twice a

or sheds the first summer, as the sun and flies are hard on young things. They might go out nights in summer and days in the fall. We have not the plans of the buildings you refer to. They are very complicated and expensive, and would not be suitable for an ordinary

GROWING CORN.

1. What is the best variety of corn to grow for ears, not for silo? 2. Will Flint, Compton Early or North

Dakota yield as much grain as the dent

W. G. PETTIT & SONS HOLSTEIN BULLS ARE SCARCE FREEMAN, ONT., Importers and Breeders of Scotch Shorthorns

110 head in the herd, 40 imported and 20 pure Scotch breeding cows. Present offering: \$ im-ported and 6 pure Scotch from imported sires and dam; 6 Scotch-topped from imported sires; also imported and home-bred cows and heifers of the most popular type and breeding. A few choice show animals will be offered. Burlington Jct. Sta. . Telegraph & Telephone

ONLY THE BEST CONLY THE BEAT. Eight young bulls and 10 heifers of the purest Sootch breeding and of the low-set kind, as good as I have ever offered, for sale at prices that will induce you to buy. Most of the heifers are in calf to im-ported bulls that stand as high as any in the world in breeding and individual excellence. High-class Shropshires for sale as usual. BOBERT MILLER, Stouffville, Ont. Representative in America of Alfred Mansell& Co., Shrewsbury, Eng. The largest exporters of live stock in the world.

SHORTHORNS. 8 young bulle, 11 heifer calves, yearlings, two.year SHORTHORNS. 8 young buils, 11 neuter calves, yearlings, two-year-olds and young cows for sale. Several Miss Ramsdens and the very best families represented. Prices mod-erate. G. A. BRODIE, Bethesda, Ont. Stouffville Station.

EILLEURST FARM (ESTABLISHED FORTY YEARS.)

SHORTHORN herd numbers 30, with Imp. SHORTHORN herd numbers 30, with Imp. Scottish Hero (Missie) and Broad Scotch (Sittyton Butterfly) in service. Some choice young bulls and heifers for sale, by Joy of Morning, Scottish Beau, and Lord Mountstephen, from imported and Canadian-bred dams of HAMPSHIRE flock 80 ewes; milk strains.

Jam. A. Oochrane Hillhurst P. O., o Compton Co., P. Q.

16

All pure Scotch, two imp. in dam, 7 from imp. sire and dam, others by imp. sire and from Scotch dams of popular families. Herd numbers 72; headed by ... Imp Greengill Victor, a Princess Royal; bred by W. S. Marr. Present offering also includes a number of Scotch heifers '33 and imp. cows in calf. If you want a herd header, or cows that will produce '34' them, write us.

R. MITCHELL & SONS Nelson Ont., Burlington Jct. Sta.

Hawthorn Herd of DEEP-MILKING SHORTHORNS. FOR SALE: Five young bulls, also a few females, by Scotch sires. Good ones. om

Wm. Grainger & Son, Londesboro, Ont.

JERSEYS For quick buyers, we are going to to the natural increase of our herd and so many heifers coming into milk, we make the above offer. Stock of all ages. State what you want and write to day to B. H. BULL & BON, om O. P. B. and G. T. R., Brampton, Ont.

Jerseys AND Yorkshires WM. WILLIS & SON, Newmarket P.O. and Sta

I still have

517

10 PRIME YOUNG BULLS AT \$50 TO \$100 EACH. Act quickly if you want one.

G. W. CLEMONS, ST. GEORGE, ONT.

HOLSTEINS, TAMWORTHS, COTSWOLDS HOLSTEINS, TAMWORTHS, UUTS WOLDS Present offering : Bull calf, 8 mos., won 4 first prizes. Litter 3-months-old pige, and younger ones; choice azimals. Ram and ewe lambs and two 2-shear rams; perfect covering. **BL. O. MCCP-TOWE**, o Hilton, Ont., Brighton Sta., G. T. B.

4 Holstein Bulls For sale, from 7 to 18 months old, from dams making over 300 lbs. of butter per year. For s. E. SMITH, - DUNDAS, ONT.

FOR SALE—35 HOLSTEIN SPRING CALVES of the famous De Kol and Abbekerk breeding, from deep-milking dams, for March, April and May delivery; also cows and heifers. H. GEORGE & SONS, Crampton, Ont. 0

Holstein Calves of both sexes for sale. choice young cows, from 2 to 5 years of age. The record of 13 cows at cheese factory for 8 months was 120,845 lbs., average per cow of 9,295 lbs. Write for prices. J. A. CASKEY, Madoc, Ont. of

Riverside Holsteins

80 head to select from. Young bulls whose dams have official weekly records of from 17 to 21 lbs. of butter, sired by Victor De Kol Pietertje and Johanna Rue 4th Lad. Write for prices. 0

Matt Richardson & Son, Caledonia P.O. and Station.

SPRING BROOK AYRSHIRES are bred for profit. Heavy milkers, high testers, have good udders and large teats. Orders booked for bull calves. W. F. Stephen, Spring Brook Farm, Trout River, Que. Carr's Crossing, G. T. R., 1 mile; Huntingdon, N.Y.C., 5 miles.

AYRSHIRES FOR SALE. Four yearing bulls and 6 heifers, and spring calves of both series, all sired by Minto (10490). Bred by A. Hume, Menie P. O., Ont. F. W. TAYLOR, Wellman's Corners, Ont.

Special Offerings in Ayrshires for the next 30 days.

for the next 30 days. On account of the blocked condition of the railroads, I still have 5 first-class bulls ready for service from heavy-milking dams, that I have decided to clear out at greatly reduced prices, in order to make room for spring ar-rivals: also 3 big bull calves. Write for prices. W. W. BALLANTYNE, Neidpath Stock Farm. Stratford. Ont. Farm, Stratford, Ont.

AYRSHIRES. We are now offering 8 Ayrshire bulls from 5 to 15 months old, guick. Also Buff Orpington Eggs, \$1 for 13. H. J. Whitteker & Sons.

North Williamsburg P.O., Morrisburg Sta

HIGH-OLASS AVERALIAE OATTLE For Saras: Both strag; built and builts control to a superior of the strag; built and builts control to a superior of the strage of the strage of the Tom Science and White Science of the strage Tom Science and White Science of the strage and a discourse." Weinsche own, out.

STOCKWOOD AYRSHIRES are bred for size,

trade. ILLE, τ. SON



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m P.O. RM.

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FOR SALE: Young bulk and heifers from best blood. Shearlings and lambs bred from imp. stock on side of sire and dam. Prices reasonable. o E. PUGH. Claremont P. O. and C. P. E. Sta. day 3. It is better to keep calves in pens SHORTHORN HERDBOOK

The Dominion Shorthorn Breeders' Ass'n will pay \$1 each for any of the following vol-umes of their herdbooks: Volumes 7, 8, 9, 10, 11, 12, 13, 14, 15; also ist vol. Clydesdale Stud-book, and ist vol. Dom. Ayrshire Herdbook. Send by express if possible, unpaid (if by post, postage will be returned with price). 0 farm. HENRY WADE, Sec'y, TORONTO, ONT

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tation

HILL 0.

15 imported Scotch Shorthorn heifers, all in calf or calves at foot; 2 imp. bulls; both in pedigree and individually these animals are gilt-edged. Four three year-old imported Clydesdale fillies, very large and A1 quality.

IMPORTED

SHORTHORNS AND CLYDESDALES

ALEX. ISAAC, • Cobourg P.O. and Station

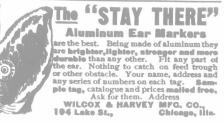
HIGH-CLASS SHORTHORNS 8 heifers, in calf to an imported South bull; 6 bulls ready for service; about 15 heifer and bull calves, from 3 to 12 months old. Prices very reasonable, considering quality. Inspection invited. **FRANK** W. SMITH, Walnut Farm, Scotland, Ont. o

SHORTHORNS For sale: Two choice bulls, 10 and 11 months old, got by imported in dam bull. Also York-shires, imported and home-bred. Write res, imported and home-bred. Write C. & J. CARRUTHERS, Cobourg, Ont.

Barren Cow Cure

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

SHORTHORNS AND BERKSHIRES. 4 extra good bulls from 7 to 9 months old, by Bandoleer = 40106 =; also 1 2-yr-old. Cows and heifers, with calves at foot or in calf, heavy milkers in herd. Berkshires—young sows 3 and 5 mos. old, lengthy bacon type, and with pedi-grees of best breeding. Prices reasonable. o F. MARTINDALE & 80N, York, Ont., Caledonia Sta.



corns?

3. How is corn for ears harvested? Are the cobs pulled off tefore the stalks are cut, or is the corn cut and shocked and the ears pulled off afterwards?

4. Must the corn be perfectly ripe tefore it is cut, or will it mature in the shocks?

5. What kind of a building is used for keeping the ears in until it is shelled? 6. What is a fair average yield per acre, and is 36 inches apart both ways about right for planting in hills?

Ans.-1. Compton Early and North Dakota and King Philp, for the northern part of Ontario. The latter is the largest yielder.

2. North Dakota and Compton Early are probably the best-the largest yielders, with the former in the lead in the southern part of the province.

3. The stalks should be shocked, and when dry, the ears are husked off, with the husks left on the stalks.

4. The corn should be glazed or past the milky stage before it is cut and put into shocks, then it will mature in the shocks.

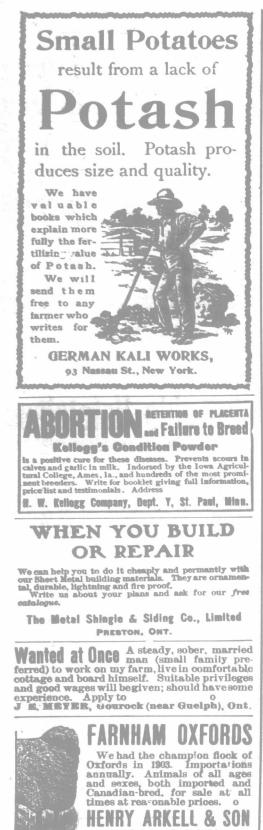
5. Cribs are used to keep the ears in until they are shelled. It should be made of 3-inch straps put about three quarters of an inch apart; built wider at the top than at the bottom.

6. The average yield per acre is about 100 to 120 bushels of ears, or from 50 to 60 bushels of shelled corn. Many growers plant from 40 to 42 inches apart in hills.

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



the mile from electric care. Lachine Rapide, P. Q.



518

ARKELL, ONTARIO. "MODEL FARM" HROPSHIRE

Everything sold that has been offered for sale. Am booking orders for rams and show flocks. August delivery. Write for prices, o

THE FARMERS ADVOCATE.

If you were sure you could buy for 60c.'per foot a satisfactory hog trough good for 10 years' hard usage, you would buy quick, wouldn't you? Leal's Patent Steel Trough will fill this bill easy. Honestly made,heavy and strong, nice rounded edges. It's a winner. Money back if not as represented. Every foot guaranteed.

Get catalogue from WILBER S. GORDON, TWEED, ONT.

SUBOPEAN ADVERTISEMENTS

W. W. CHAPMAN,

Secretary of the National Sheep Breeders' Association.

Secretary of the Kent or Romney Marsh Sheep Breeders' Association,

and late Secretary of the Southdown Sheep Society.

Pedigree Live Stock Agent, Exporter and Shipper. All kinds of registered stock personally selected and exported on commission; quotations given, and all enquiries answered

Address ; MOWBRAY HOUSE, NORFOLK ST. LONDON, W. C., ENGLAND.

Cables-Sheepcote, London.

THE RIBY HERD and FLOCK SHORTHORN AND LINCOLN CATTLE SHEEP

The largest of each in England: Established 150 years, with world-wide reputation both in the show ring and sale yard. Holders of the 100-guineas champion prize at Smithfield Show, London, 1902, against all breedes, and breeder of the two 1,000-guineas rams, and also the heaviest sheep at Chicago Show, 1903. Selec-tions for sale.



RESERVE " FOR CHAMPION IN THE SHORT-WOOL CLASSES, SMITHFIELD, LONDON, 1901.

Splendid Mutton, Good Wool, Great Weight.

This highly valuable ENGLISH BREED OF SHEEP is unrivalled in its wonderfully early maturity and hardiness of constitution, adapted to maturity and nardiness of constitution, scapeed to all climates, whilst in the quality of mutton and large proportion of lean meat it is unsur-passed; and for crossing purposes with any other breed, unequalled. Full information of

JAMES E. RAWLENCE. SECRETARY HAMPSHERE DOWN SHEEP

BRANDWERS' ASSOCIATION.

QUESTIONS AND ANSWERS.

Miscellaneous.

FEEDING BRAN.

Which is the better way to feed bran to sheep, dry or in slop? G. R. A. M. Ans .- Dry, under ordinary circumstances; but in mash first day after lambing.

STABLE PLAN.

G. R. A. M., by all means have the long feed passage more than four feet wide; otherwise the plan is very good

POISONING RATS.

Could you tell me what kind of poison to use to suffocate rats in their holes. Would it be injurious to cther animals in the barn? R. W. L.

Ans .- Saturate a rag with carton bisulphide and ram it down the hole, cover The gas arising from the over. evaporation of the liquid is heavier than air, so will not rise to injure other animals. Be careful not to handle the poison near a lighted lamp, as it is explosive.

GROWING MANGELS.

Will you kindly state a method of growing mangels for stock feeding. F. W. M.

Ans .- This is a crop that requires a deep, rich soil. As the seed should be sown rather early, the land should be prepared the fall before. Whether the previous crop is grain or hay, it should be plowed shallow in early fall, well worked and manured before being fall plowed, or ribbed up in drills about eighteen inches apart, and manured in winter. In the spring, give thorough cultivation with cultivator, disk, or gang plow, and rib up early in May in drills about thirty inches apart. But if the land is a light sand, it would be best to sow on the flat. Sow plenty of seed, one for every inch, or about eight pounds to the acre. If rain packs the top of the rows before the young plants are up, roll with a land roller. Cultivate early and often, and thin to about sixteen inches apart.

SICK SHEEP

1. Ewe seems to be all right in health, but when she draws up her cud has more than a mouthful, and some keeps dropping out.

2. Ewe took sick suddenly; weak in the hind quarters, dropped down when walking, and seemed to be puffed around the eyes, and died after four days' sickness. 3. What is the usual price charged for service for a pure-bred boar to pure-bred sows of the same breed? E. M

Ans.-1. Examine the teeth. Sometimes a cap of one of the grinders while shedding the teeth sticks on the new teeth and does not fall off, causing difficulty in chewing. Remove the cap with small pinchers. Sometimes pieces of wcod, or other substances, get lodged between the teeth or between the cheek and the teeth.

2. Only a personal examination, and probably a post-mortem, could decide

FOUNDED 1866



ROBERT ELLIOT, breeder of Duroc. Jer-sey wine; A few choice early ones for saie. Two sows due to farrow soon. Pigs to farrow soon. Pigs furnished not akin.

Come or write. Box 41. Ormstown, Quebec, TAMWORTHS AND HOLSTEINS Boars fit for service, sows bred and ready to breed, 20 boars and sows from 2 to 4 months; a fine to of March pigs, Pairs not akin. BEETRAM HOSKIN, Grafton Sta., G. T. R. The Gally P. O.

GLENHOLM HERD OF TAMWORTHS We are now booking orders for spring litters. Have 5 boars and 5 sows, 6 months old, left, and a fine lot of younger ones.

F. O. SARGENT, Eddystone, Grafton Sta., G.T.R. TAMWORTHS At living prices. Have some excellent young stock of good bacon type; both sexes. LOUIS D. BARCHFELD, Grimsby, Ont., P. O. and Sta-tion. Telephone on farm. o



GLENBURN HERD ; winners of gold medal 2 years in succession ; averages 100 head. Sires at head of herd : Imp. Holywell Hewson and Oak Lodge Prior. A large number of sows for sale, due to farrow in March or April, also a few good young boars. Prices reasonable. David Barr. Jr., Renfrew, Ont, 0 Box 3.

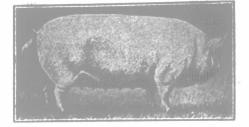
Chester White Swine between four and either sex; good bacon type. Sires and dams were prisewinners at Toronto and London fairs. Write sunnyside Stock Farm, Glanworth, Ont. or prices.

FOR SALE --Ohio Improved Chester Whites, the FOR SALE largest strain, oldest established regis-tered herd in Canada; young sows in farrow; choice young pigs, six weeks to six months old; pairs not akin; express charges prepaid; pedigrees and safe delivery guaranteed. Address o E. D. GEOEGE, Putnam, Ont.

YORKSHIRES FOR SALE, from the Pioneer Herd of the Province Quebec, both series and all ages. Satisfaction guaranteed on all mail orders. Also a few Pekin ducks and White Rock cockerels left for sale.

Railroad stations: { Athelstan, N. Y. C. Huntingdon, G. T. R. Address

A. GILMORE & SONS, Athelstan, Que, Improved Yorkshires

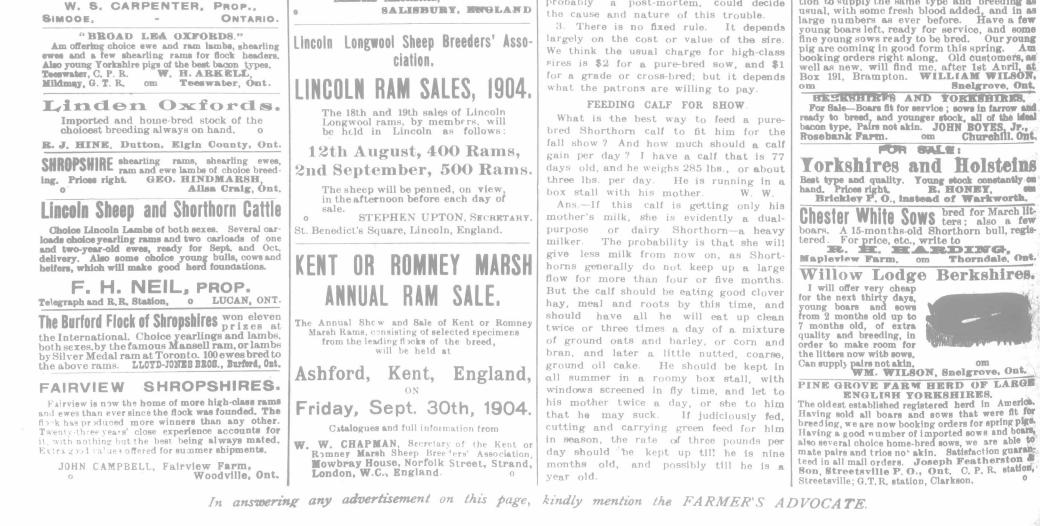


Over three hundred for sale. The last three years our herd has won ninety per cent. of the first prises at the leading shows, competing against American and Canadian breeders. We have more imported animals in our herd than all other breeders combined in Canada. We have the best blood from the leading herds in England and Scotland. rea-onable, Prices

D. C. FLATT & SON, MILLGROVE, ONT.



Cables-Dudding, Keelby, England,



Can supply pairs not akin. om WM. WILSON, Snelgrove, Ont.

Snelgrove, Ont.

ENGLISH YORKSHIRES. The oldest established registered herd in America. Having sold all boars and sows that were fit for breeding, we are now booking orders for spring pige. Having a good number of imported sows and boars, also several choice home-bred sows, we are able to mate pairs and trios no' akin. Satisfaction guarant teed in all mail orders. Joseph Featherston & Son, Streetsville P. O., Ont. C. P. R. station, Streetsville; G.T. R. station, Clarkson. APRIL 7, 1904

THE FARMERS ADVOCATE.

519

Worth Its Weight in Gold **To Weak Men** This is the way my patients write about

Dr. McLaughlin's Electric Belt

MR. F. L. COGLAN, of Edmonton, Alta., who suffered for years with stomach trouble, weak back and insomnia, has this to say about my Belt :--

DR. MCLAUGHLIN-Dear Sir: After giving your Belt a fair trial I now drop you these few lines to let you know how much good your Belt has done for me. I am glad to say that my back and stomach are all right. I can sleep fine all night and eat well also. I think your Belt is all right. I would not part with it for its weight in gold. Hoping you will excuse me for not writing sconer.

My way of restoring strength is different from all others. It is my own plan, and it is as simple as anything can be. I find a man suffering from stomach trouble, arising from a weakness of the organs

of digestion and assimilation. Now, what is the use of pouring drugs into that poor stomach? It does not want drugs to force an action. It wants strength.

The proof of this argument is substantiated by the following letter from MRS. E. S. ING, York Street, Hamilton, Ont., who has worn different appliances known as Electric Belts :---

DR. McLAUGHLIN-Dear Sir,-I have received a great deal of benefit from using your Belt. I have worn other Belts, but find yours better than any other, as it has cured me of indigestion, and a feeling of weakness and general debility.

You know there is not an organ in the body which will not do its work well if it has the strength. You will never feel a pain or moment of distress unless some part of your body is weak. Remember that, and don't paralyze your poor stomach with poisons. My plan is to give strength to the part that is ailing. I do that, and the trouble is gone before you

My treatment is a success in any case where strength is lacking, whether in the nerves, stomach, heart, kidneys, liver or any other part. My appliance gives a soothing, constant electric glow, which is taken by the body just as a sponge takes

up water. It cures weakness in any guise, as well as any other form of pain. My cures prove the truth of my arguments. I don't think there is any case of weakness, failure of vitality or of any trouble resulting from the imperfect action of any organ of the body that I can't cure. Of course. I do not cure all cases, but I cure every case I undertake, and I have such confidence in my treatment that

I Will Cure You First, and You Can Pay Me After the Work is Done.

All I ask is that you secure me while you are using it. I don't ask you to take any chances. I am willing to do that.

My strongest arguments are the letters from prominent people whom I have cured. Every man or woman who comes into my office gets a practical illustration of my method of cure, and goes away convinced that the claims I make for my ELECTRIC BELT are TRUE. After seeing original letters from the cured (letters which I am permitted to exhibit) their doubts are expelled. They know that I have not only proven that electricity is the substance of life and organic vitality, but I have perfected the best known appliance in the world for replenishing that force in the body when it is lost. My Electric Belt is the result of years of scientific study, coupled with experience and mechanical skill.

My cures are simply marvellous-Take the case of Thos. Hobbs, Glencoe, Ont. Read it-it explains itself:

Wonderful Cure of Weakness—Restored to Complete Manhood

Wonderful fure of weakness—Restored to complete mathematical Dear Sir: I am happy to state that I am completely cured of my old troubles. Your Belt has been to me of inestimable value. Its value cannot be estimated in dollars, for to me it has been the means of my regaining my lost strength and vigor, and of relief from pain. For over ten years I suffered from troubles from which concerning my case, and receiving a hopeful reply I finally decided to give it a trial, although I had at that time very little faith in being cured. In despair I wrote to you ble and almost impossible that such a simple treatment should effect a cure in such a complicated case as mine was. I had not worn your Belt two weeks before I began your Belt, and wish you future health and happiness therefrom. I most sincerely thank you for your kindness, and shall always be pleased to recommend your Belt to my suffering fellow-men. Very sincerely yours, THOS. HOBES, Glencoe, Ont.

Another man who claims a fortune in my Belt:

Made a Man of Him.

DR. MOLAUGHLIN

Dear Sir: It gives me great pleasure to certify to the excellence of your Belt after a three months' trial. It's worth a fortune to have health and strength and be a man. You are at liberty to refer anyone to me about the Belt. I will be only too pleased to help others to get the benefit that I have received. Yours gratefully, JAR. ALLDI, SE Bruce Street, London, Ont.

I am an enthusiast, you say. Why should I not be? I have the gratitude of thousands of people who have been cured by my Electric Belt after the failure of the best physicians. I am enthusiastic because I know that I offer suffering humanity the surest cure for the least expenditure of money the failure of the best physicians. I am enthusiastic because I know that I offer suffering numanity the surest cure for the least expenditure of money that is known to-day. I have gained my success by learning how to treat my patients and then curing them. I understand the action of the current on the human system. My years of experience have taught me how to apply electricity. I charge nothing for my knowledge, khowing that it helps me. My patients are my friends. They are advertising my busines. You can talk with the men and women who have been cured by my treatment, and that's worth considering. I might preach for years in my efforts to gather converts to my way of curing disease and nobody would pay any attention to my arguments, but when I tell you I have cured your neighbor, Mr. A Smith, or your old friend, Mr. Johnston, and you can go and ask them about me and they tell you I have cured them, then I have given work and and they tell you I have cured them, then I have given work and and they tell you I have cured them, then I have

given you proof, and you know that I do all I claim. And I want you to give me credit for what I prove. There's nothing surer than the word of an honest man, and when such men as these admit that I have cured them you know that I can cure you.

Tell me where you are and I will give you the name of some one in your own town or neighborhood whom I have cured.

FREE BOOK.

OFFICE HOURS : - 9 A.M. to 6 P.M. Wednesday and Saturday till 8.80 P.M.

SPECIAL NOTICE. Dr. McLaughlin's Electric Belt is the only electric appliance sold in Canada with which the patient has the care of a physician during the time it is used. Agents or drug stores are not allowed to sell my Belta Every man who admires the perfection of physical strength should read my beautifully illustrated book. It tells how strength is lost and how I restore it with my Electric Belt. I will send this book, closely sealed, free upon request. you are not the man you should be, write to-day.

M. S. MCLAUGHLIN, 130 YONGE ST., TORONTO, CAN.



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

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