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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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

PUBLISHED AT LONDON, ONTARIO. SEPTEMBER 8, 1904. WINNIPEG, MANITOBA. No. 624

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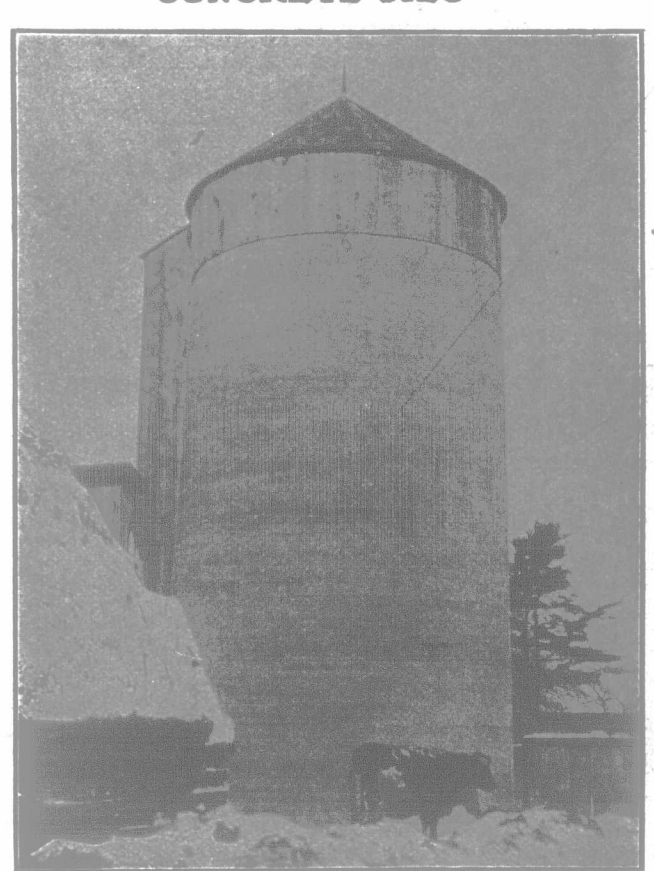
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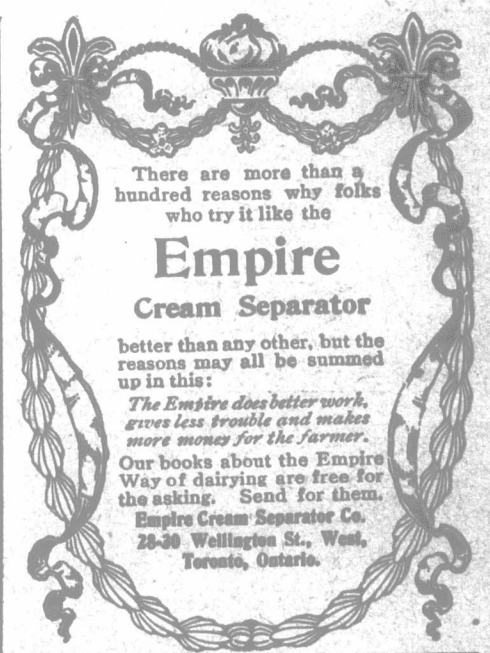
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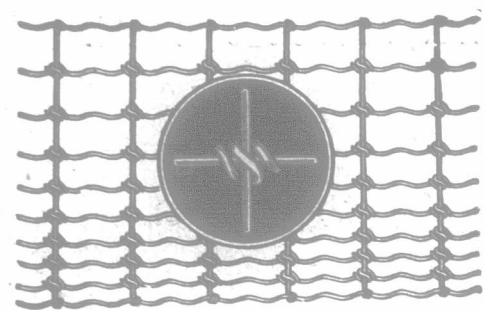
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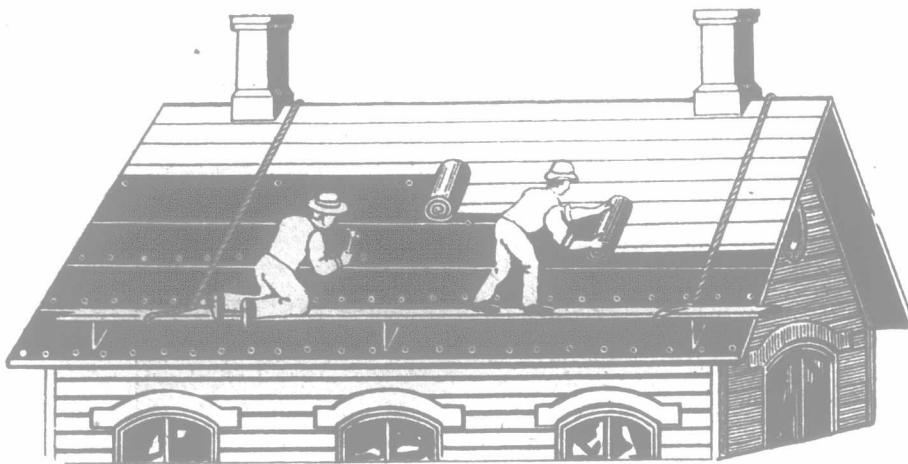
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The Farmer's Advocate

"PERSEVERE AND SUCCEED" and Home Magazine. ESTABLISHED 1866.

VOL. XXXIX.

LONDON, ONT., AND WINNIPEG, MAN., SEPTEMBER 8, 1904.

No. 624

EDITORIAL.

Forest Protection.

Forest fires have raged during the present summer over large areas in widely separated districts of the Dominion, but the total loss accruing to the country from such havoc can never be estimated. British Columbia and New Brunswick have been the scenes of the greatest loss. In the former Province, the estimated value of the timber destroyed has been placed at \$2,500,000, and to this must be added the destruction of the young growth and the loss arising from the land lying idle until reforested or cleared for agricultural purposes.

These losses, and Canada suffers annually from such, indicate that the whole of the forest area of Canada is in need of a strong, efficient forest police or fire department, such as is maintained upon limited areas in several of the Provinces. In fighting forest fires, much can be accomplished by timely preventive measures. Unlike fires in cities, forest fires start slowly, and, in most cases, smoulder in the ground for days and weeks, until, fanned by a stiff wind, they spread and increase in fury. Such being the most common manner in which forest fires arise, it is at once obvious how much damage might be prevented were our forests patrolled by competent rangers during the dry seasons, whose duty it would be to put out small fires and summon assistance in cases where fire had gained considerable headway. The plan is perfectly feasible, and the increasing value of timber, together with the immense wealth Canada has vested in her forests, warrants the immediate installation of a protective force of rangers for our wooded districts. Our forests are too valuable as national assets to be entrusted to the care of the small population in the most heavily-wooded Provinces, and their protection from fire should be assumed by the nation at large. Such a work, we submit, is of infinitely greater moment than the protection of the nation from an invading army, and as a business proposition should commend itself to our legislators at Ottawa.

Factory Regulations.

Dairymen, particularly those interested in the management of cheese or butter factories, will appreciate the information which we have obtained and published in another department of this issue, describing in detail the system under which milk is furnished to the St. Charles Condensed-milk Company at Ingersoll, Ont. The suggestion has been made that similar regulations, if enforced at the cheese and butter factories, would obviate many of the complaints now made. In the case of cheese and butter, however, it is not necessary to put corn ensilage upon the "black list" of prohibited foods, along with turnips and brewers' grains. Sound ensilage has not proved prejudicial to the production of the finest dairy goods. The production of condensed milk is an extremely critical process. On account of the time that often elapses before it is used, and the distances and varying conditions under which it is transported, it must be absolutely free from any incipient flavor of an unfavorable nature. It will be noticed also that the patrons receive a very much better rate for their milk per hundred than the cheese-factory patron secures, as a rule, which compensates him for his extra trouble, and also for the fact that he receives no by-product, such as whey, in return. These regulations, it will be noticed, make no provision as to the condensed-

milk factory conditions, but for the preservation and success of their own business that company are bound to maintain it in a perfect sanitary state. It is no secret that too many of the cheese factories, curing-rooms and premises in this country have been allowed to lapse into a disgraceful condition, and when this fact is remembered along with repeated complaints about "off-flavored" cheese, we do not wonder that there has been a call for some more rigid oversight of these establishments, which, though privately owned, are yet an essential factor in an industry in which the public as a whole and the export trade of the country are concerned.

National Progress and Education.

The attention of every reader of Canadian newspapers must have been attracted, during the whole of this year, by the constant reports of new arrivals of immigrants, one thousand by this vessel, fifteen hundred by that, this train-load from Minnesota, that from Nebraska, until the number has been swollen into many thousands—and still there is room for more. "Where the honey is the flies will gather," is an old adage which has a germ of truth in it, and this tide of immigration most certainly shows where a goodly amount of the honey in North America most assuredly lies.

It is scarcely necessary, perhaps, to descant upon the tremendous natural resources of Canada. Every Canadian knows, every immigrant coming into the country must soon find out, the endless possibilities of the Dominion—its vast areas of plain as yet uncut by plowshare; its forests broad and deep through whose shades no echo of axe has as yet resounded; its endless chain of waterways filled with fish; its cliffs and mountain ranges, perforated with veins and ores which only lie awaiting the time when a greater industry shall send ten thousand shafts deep into the bosom of the earth, and a glare of a thousand smelting works shall shoot up the sky from Labrador to British Columbia.

The resources assuredly are here. The one thing remaining is to develop them. In consideration of this question, may we not, perhaps, with some profit to ourselves, glance, for a moment, at our neighbors across the line. We hold that there are many lessons which the Canadian nation is capable of teaching the United States. We hold, also, that there are many which she may well teach us. One of these, possibly, is the solution to the problem of the astonishing industrial progress which the United States has assuredly made, and which has been very well sifted out from a mass of "evidence" by Mr. Alfred Moseley, whose celebrated "commissions" of two years ago made a most exhaustive study of the whole question.

For the benefit of those to whom the "Moseley Commission" may have evaporated into all but a name, may we recapitulate. Some years ago, Mr. Arthur Moseley, an Englishman striving to win a fortune in the diamond fields of Kimberley, where the mining industry was then carried on in a desultory and non-paying way, was much impressed with the practical ability and business-like manner in which two American engineers, Williams and Seymour, who came into the district at that time, took hold of the business, and, in a remarkably short time, succeeded in placing the whole mining industry of South Africa on a firm and profitable foundation. From these men

his attention became directed to the country from which they had come, and he was led to inquire as to the system of training by which, presumably, such competence and ability had been evolved. With the liberal-mindedness by which an unbiased man is always willing to learn from others, and the patriotism which ever seeks the progress of one's own land, he determined to make the matter a subject of thorough investigation. To quote from his own words: "I felt that, not only must we investigate the educational system in vogue, but that the workmen, through their trades unions, should also be given an opportunity of seeing at first hand what is being done on the other side of the Atlantic. Holding these opinions, I organized my two commissions."

The conclusions reached as a result of the exhaustive examination of the industrial and educational systems of the United States by these two commissions, which, consequently, came out from England for this express purpose in 1902, are most interesting. While giving credit to the educational system, whose tendency toward a "practical education" is noted, and whose devotion to laboratory work, manual training, etc., is favorably commented upon, yet the almost unanimous decision of the Commission was, as summed up in the report of the Rev. T. A. Finlay, that "America's industry is what it is, primarily because of the boundless energy, the restless enterprise, and the capacity for strenuous work with which her people are endowed; and because their powers are stimulated to action by the marvellous opportunities for wealth-production which the country offers."

Now, while it would be a sorry sight to see the people of Canada resolved into so many millions of mere money-grubbing machines—there is a brighter destiny than that for the sons of the great Dominion—yet, to see her industries develop and her people prosperous is a consummation to be desired by every true friend of the country. We have as great "opportunities for wealth-production" as the United States. May these not be undeveloped while there is a single child of the soil, or a single longing immigrant, in want for a single necessity to life or comfort which he can wrest from old mother earth by honest toil. May our people be also marked by that "boundless energy" and "capacity for strenuous work" which have made our southern neighbor a nation to be, in many ways, envied.

In order to the achievement of these results, we believe Canada is disposed to learn from Great Britain and other countries the value of steadfastness of purpose and the superior quality and permanence of product due to education. Already the trend of our educational policy is in that direction, and we firmly believe that in the training of the generation now rising lie the possibilities of a greater nation than yet has been. But let us never forget that in the words of Goethe: "Energy will do anything that can be done in this world, and no talents, no circumstances, no opportunities will make a two-legged animal a man without it." And, while advancing in material gains, in the making of comfortable homes, the improvement of our lands, the beautifying of our houses, let us never be deluded into thinking that these things are all of life. Let the thinking head and the kindly heart ever go with the busy hand. Let not the glint of gold obscure the high ideals of culture, nobility of life, intellectual and spiritual progress, but let the added wealth to each bring but the greater responsibility for well-doing, the greater opportunity for accomplishing the summum bonum, the Great Good in all other lines.

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

PUBLISHED WEEKLY BY
THE WILLIAM WELD COMPANY (LIMITED).

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 2. TERMS OF SUBSCRIPTION.—In Canada, United States, England, Ireland and Scotland, \$1.50 per year, in advance; \$2.00 when not paid in advance. All other countries, 12s.
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- Address—THE FARMER'S ADVOCATE, or
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Camera Competition.

Now that the holiday season is here, cameras and kodaks are greatly in evidence, and as our previous competitions in photography have proved so successful, we have decided to announce another open to all amateurs. Our range of subjects will be wide, so that competitors may pursue the special line for which they are particularly adapted.

Our offer is:

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| 1st Prize | \$5.00 |
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for the best photographs of country homes, home or garden groups, interior views, field scenes, fruits or flowers, choice bits of scenery now at their best, children, animals, and so on.

RULES GUIDING COMPETITORS.

All photographs must be mounted, and preference will be given to those not less than 4 x 5 inches in size.

They must be clear and distinct. In making the awards, consideration will be taken of the artistic taste displayed in the choice of subjects.

They must reach the office of the "Farmer's Advocate and Home Magazine," London, Ont., not later than October 1st, 1904.

The name of competitor, with P. O. address, must be marked on the back of each photo, as well as the name and location of the view photographed.

Any competitor may send in more than one photograph, but can only obtain one prize.

All photographs competing shall become the property of the "Farmer's Advocate."

No photographs from which any engraving has been made is eligible for competition.

Worth Double the Price.

Mr. J. D. McInnes, Stormont Co., Ont., says: "I like the "Farmer's Advocate and Home Magazine" very much, and would not do without it for double the price."

Letters to a Young Farmer.

The question has been asked: "In view of present prices and prospects, would you advise a young farmer to take up dairying as his specialty?" That depends to a considerable extent upon the circumstances and the tastes and preferences of the man, and also, to some extent, upon his location as to readiness of access to a good market for his products, although, with the favorable transportation facilities of these times, the latter consideration cuts less figure than formerly, and will probably count still less as a factor as railways radiate more generally throughout sections not now so well served as others. With a farm fairly well adapted to grazing, as well as grain-growing, and where the water supply is sufficient, either from a running stream or wells, and the distance from a good market is not too great, dairying, as the principal feature, is doubtless the safest and surest branch of farming for profit, taking the years and the markets as they come. There are no products of the farm more certain, with reasonable foresight in the management, than grass and milk, and none that varies less in selling price than milk.

The constantly increasing population of our cities, the growing popularity of milk as a combination with the cereal breakfast foods now so generally used, the fact that butter never goes out of fashion and that prices, both in the home and British market, for this product are more uniformly good than ever before, and that the capacity for production of our principal competitors, the small European countries, has nearly reached its limit, all point to a strong probability that the markets and the prices will make dairying profitable. The abnormal price of cheese last year rather spoiled the patrons of the cheese factory, and we find them complaining, as is the privilege of the farmer, when prices become normal, forgetting that they were too high only a little while ago, and that the average should be considered satisfactory. Where the grain and fodder crops of the farm are principally grown for the feeding of stock, it is seldom that most of these are not fairly productive. By the feeding of cows, a large amount of manure is produced, and this, together with the growing of clover where it succeeds, furnishes the readiest means of maintaining the fertility of the land. And clover is also one of the most complete stock foods produced on the farm. The purchase of a herd of good dairy cows to begin with would require, perhaps, more capital than the average young farmer commencing business could command. In that case, he will wisely commence with a few, and add to them as his means will allow, meanwhile raising the heifer calves from his best cows to increase the herd or take the places of any that may fail to be profitably productive. In the meantime, if more grain than the live stock on hand can utilize, it may be sold for cash on the market. Dairying as the main feature may safely be recommended for the reason that with it, as side lines, the feeding of pigs and the raising of young cattle may be carried on, largely upon the by-products of the dairy, such as skim milk, buttermilk or whey. Another reason is that, while the average farmer is more likely to be able to make a profit from cows than from the raising, buying and feeding of beef cattle, yet the most intelligent, ambitious and progressive of farmers can find scope for their skill in up-to-date dairying as breeders, feeders and manufacturers. And it is taken for granted that the young Canadian farmer of the twentieth century will not be content to rank as an "average" farmer, but will aim at a higher standard than that of mediocrity. The objection to dairying, now becoming rather common, that it involves much labor and close confinement to home and business, and that it is difficult to secure satisfactory help, while it has some foundation, should not be considered sufficient to decide one against a line of farming so safe and sure. No part of the work of dairying can properly be called hard work for a man, as compared with much of the other work on the average farm, and where female help can be had in the house, or there are grown-up daughters trained to share the work with the mother, there is no valid reason why they may not assume part of the dairy work. Milking may not be considered suitable work for women, and we do not think it should be all assigned to them if it can be avoided, but the unpleasantness of milking may be greatly lessened by a little forethought and management in providing clean walks to the stable, keeping the stables and the cows clean, and giving assistance in the carrying of the milk to the dairy, in case a cream separator in a clean compartment of the barn is not used. In some families, among the most thrifty and cultured that we know, the daughters are not above doing their share of the milking and other work of the dairy, and have no cause to be ashamed of their part in it, but show an intelligent interest in the work that raises rather than lowers them in the estimation of sensible and right-thinking people. It goes without saying that their work may be greatly and reasonably lightened by allowing them to share in the cash profits of the

business, a consideration that too often fails to enter into the calculations of farmers, and doubtless accounts, in a large measure, for so many of their sons and daughters finding their way into factories and other sources of employment in towns and cities. This digression the young farmer will please pardon, since he is not supposed to have reached the stage at which grown-up daughters figure in his proposition. It has been taken for granted, however, that our young friend has taken an active partner into his business in the person of a well-chosen wife, for without this happy combination dairying on the farm can hardly be successfully conducted, and without this relationship he will fall to realize the true philosophy of life. Then, if help is needed to carry on the work of the dairy farm he will have to wrestle with that problem as best he can, and, judging from examples that have come under our notice, this is a matter the successful solution of which depends largely upon the judgment and tact of the man at the helm, but that is another story that may possibly come up for consideration at a later stage in the game.

Death of Mr. John Miller.

The veteran stock breeder and importer, Mr. John Miller, of Brougham, Pickering Township, Ontario, died at his home, "Thistle Ha," on Monday, August 29th, at the age of 87 years. He was born May 12th, 1817, near Hodden Castle, Annan, Dumfriesshire, Scotland, and in 1835, at the age of 18 years, emigrated to Canada in a sailing vessel in charge of a shipment of sheep and swine for his uncle, George Miller, of Markham. He was joined later by his parents, the late Mr. and Mrs. William Miller, of Pickering, and continued to reside on the farm, purchased in 1848, of 165 acres, the nucleus of "Thistle Ha," now an estate of over one thousand acres. Mr. Miller showed stock for his uncle at a Toronto exhibition in 1836, just sixty-eight years ago, and through the fifties, sixties and seventies, of last century, he was one of the leading importers and breeders, and one of the most successful exhibitors of pure-bred stock at the Provincial and other principal shows in Ontario. So far as we know, Mr. Miller was at the time of his decease the oldest importer of pure-bred stock in Canada, and we think it safe to say that no other breeder of his time made so many importations or brought to this country a better class of stock. His sons, Robert Miller, of Stouffville, and John, of the firm of John Miller & Sons, Brougham, are reckoned among the most competent judges in the Dominion today. Mr. Miller was twice married, and is survived by Mrs. Miller and ten of twelve children. Two brothers, Robert, of Pickering, and William, of Storm Lake, Iowa, and one sister, Mrs. William Scott, of Pickering, also survive. John Miller was a man of sterling character and worth, generous, genial and kindly in his manner, and blessed with the happy faculty of looking on the bright side of things. The older generation of stockmen entertain only pleasant recollections of his cheerful companionship and rich fund of humor and anecdote told in his inimitable Scottish accent, which remained with him till the last, and made a visit to "Thistle Ha," with its generous hospitality, the Mecca of stockmen for half a century, one of the most refreshing experiences. It is impossible to estimate the value to the livestock interests of Canada of the enterprising spirit and work of this pioneer in the field of the importation and dissemination of high-class pure-bred animals, for the blood of his importations runs like a red line through thousands of herds and flocks throughout the American continent.

Breeding New Grains.

Readers of the "Farmer's Advocate" will note with appreciation the illustrated article elsewhere in this issue, from the pen of Dr. Chas. E. Saunders, Experimentalist at the Central Experimental Farm, which describes the remarkable process through which a new variety of grain is produced by crossing. This is a branch of agricultural research which well deserves the very careful and continuous attention which it is now receiving. Our readers will remember, from a series of articles published some time ago, that Stanley and Preston spring wheats are two varieties of note evolved very recently by the process described at the Dominion Experimental Farms.

Work for Premiums.

Our readers, young and old, should look up the premium announcements on two pages elsewhere in this issue, describing the splendid articles which may easily be secured by obtaining new subscribers to the "Farmer's Advocate and Home Magazine." Look them over carefully, and begin to canvass to-day. With the most popular and helpful farm and home paper published in the English language in your hand, you will have no trouble in obtaining a good list of subscribers, and earning one or more of these beautiful premiums. If you need a sample copy for use in your canvass, write us for it at once.

HORSES.

Sweat Pads with Horse Collars.

Many, perhaps a majority of farmers, use sweat-pads under the collars of their working horses, with the idea that they prevent sore shoulders. It is a bad practice. It softens the shoulders instead of toughening them. The proper way to do is to fit the collar to the neck of the horse. The collar should fit closely on either side of the neck from end to end. When pressed against the shoulders it should fit so snugly on each side that you cannot put your fingers in anywhere. At the bottom there should be just room enough to slip one's fingers in; that is, it should fit thus when the hames are buckled into place.

Next see that the hame tugs are not attached too low and not too high, or the movement of the shoulders in walking gives too much motion, backward and forward, to the collar, and is almost certain to cause soreness either at the points of the shoulders or at the top of the neck. There is a proper place for the hame tugs to draw from, but it varies on different horses. When the hame tugs are attached at the right points there is very little motion of the top of the collar as the horse walks along. When the hame tugs are too low there will be a wearing backward and forward of the hames at the top, the collar will twist one way and another, and soreness almost surely follows.

To understand how to fit a collar to a horse it is well to understand how collars are made. They are fitted over a form intended to represent the neck of a horse, when as wet and soft as water will make them, and allowed to dry there. Sometimes they fit the horse, but many times they do not, and the owner must finish the job. Choose a collar of the right length and width, and soak it in a tub of water over night. Wipe off the water in the morning, and by means of the hame straps draw the collar up snugly to the neck of the horse from top to bottom. Then work the horse moderately through the day, allowing the collar to dry on him, and you will have a perfect fit for that particular horse. Every little irregularity of the shoulders will be fitted by the collar.

If you fit a collar in spring when the horse is fat it may need refitting later on when he is worked down in flesh, and as he shrinks in flesh always draw up the hame straps a little tighter, to keep the collar snugly up to the neck. Keep the shoulders and collar clean, and when working hard bathe the shoulders every night with a little salt water or white-oak bark tea. Do it always in spring, when the horses are getting accustomed to hard work.

Occasionally a horse will have sore shoulders even when so fitted, and in such a case a reliable gall powder must be used, but as a rule a well-fitting collar needs no pad.

Dietetic Diseases in Horses.

(Continued.)

LYMPHANGITIS.—This is a disease of the lymphatic or absorbent system, but as it is usually induced by heavy feeding and idleness we may be pardoned for discussing it as a dietetic disease. It is known by a variety of names, as "weed," "a shot of grease," and "Monday-morning disease." It consists in inflammation of the lymphatic glands, usually of one or both hind legs, but occasionally one or both fore limbs are attacked. Some horses are particularly predisposed to an attack, which follows a day or two's rest, during which time the horse has been given his usual grain ration. In rare cases it occurs without rest, and is then supposed to be caused by a highly-febrinous condition of the blood, and it is occasionally noticed in horses in poor condition, in which cases its pathology is hard to explain.

SYMPTOMS.—The local inflammation is usually preceded by rigors (a shivering fit), which often occurs during the night, and hence is not noticed. This may continue for hours, and, as a rule, the severity of the attack is denoted by the intensity of the rigor, which is accompanied by more or less restlessness, and lameness in the affected limb is manifested at an early stage. The rigor is succeeded by an increase of temperature. The patient now breathes hard, and sometimes sweats, paws, and may show symptoms simulating colic; the pulse is full and strong; the visible mucous membranes injected; bowels constipated, and the secretion of urine scanty and high colored. The local inflammation is manifested by swelling of the inguinal glands (those on the inner surface of the thigh) when the posterior extremity is affected, and of the brachial glands (those on the inner surface of the forearm), when in the anterior limb. The first symptoms often observed is when the teamster or groom goes to the stable on Monday morning, after his horses have rested since Saturday night, or any morning after a greater or less period of rest. He asks the horse to stand over, and notices that he is lame. If a hind leg (it is remarkable that the off hind leg is more frequently involved, and the reason cannot be given) be affected, it will be noticed by passing the hand down the inner surface of the thigh, that there is a heat and tenderness, and if in the early stages, the surface will have a beaded feel, but as the disease advances the swelling increases, and this peculiarity can no longer be detected. If the fore limb be involved this peculiarity to the touch will be noticed by passing the hand slowly down the inner aspect of the forearm. The horse is usually very

lame, and does not care to move or put any weight on the affected limb, and if the inflamed glands be pressed intense pain will be shown by violently lifting the limb, and in extreme cases the horse will moan or shriek. The swelling usually extends rapidly, and involves the whole circumference of the limb, from the body down to the coronet. As the swelling increases, the pain and lameness usually become less. In rare cases there is the formation of abscesses, but, fortunately, this seldom occurs, except in a contagious form of the disease, not known in this country. Horses that are predisposed to this disease are liable to a recurrence of the malady on slight provocation; one attack succeeds another, and after the second or third, or sometimes the first, it will be noticed that the swelling does not entirely disappear, and it becomes greater after each attack, until the limb assumes a greatly enlarged and incurable condition, called "elephantitis."

TREATMENT.—Preventive treatment consists either in giving horses that are highly fed, and predisposed to an attack, exercise every day, or reducing the grain ration or partially substituting bran for grain during idle days. In fact, it is good practice to reduce the grain ration of any horse that is used regularly and highly fed, if he is about to have a day's or longer rest. Curative treatment consists in the administration of an aloetic purgative, 6 to 10 drams, and 2 drams ginger, according to size of patient, and feeding bran only until the purgative begins to act. In the meantime, water from which the chill has been removed should be given in small quantities, and often. If considerable pain be noticed, an anodyne, as 2 drams solid extract of belladonna, or 1 to 2 ozs. chloral hydrate, may be given, but this is seldom necessary. If the pulse be full, strong and frequent, it is good practice to bleed from the jugular vein—draw one to two gallons of blood—but this is seldom practiced now. The patient must be warmly clothed, and excluded from drafts. I may say that the disease is more common in cold than in warm weather, hence he must be made comfortable. The affected parts should be bathed long and often with hot water, and after bathing be rubbed dry and a camphorated liniment applied. If in cold weather, unless he can be kept warm and drafts excluded, the bathing should be dispensed with, as a draft of cold air after bathing would produce such reaction as to complicate matters. Diuretics, as three-dram doses of nitrate of potash, should be given three times daily. He should be allowed to stand idle until the soreness and lameness have disappeared, and then he should get regular exercise, which helps to dissipate the swelling. Even in the acute stages, forced exercise removes the lameness, and dissipates the swelling to a great extent, but as soon as he is allowed to stand again both reappear, and it has been noticed that each

time the swelling is lessened in this way during the inflammatory stage, a portion of it has a tendency to become organized and permanent. Even after the inflammatory stage has passed the swelling will reappear to a greater or less extent during the night. Hand rubbing and bandaging between the knee or hock and fetlock, as the case may be, tends to prevent the swelling after it has become dissipated. Some authorities advise regular work during all stages, but the experience of most practitioners has been to the contrary. "WHIP."

STOCK.

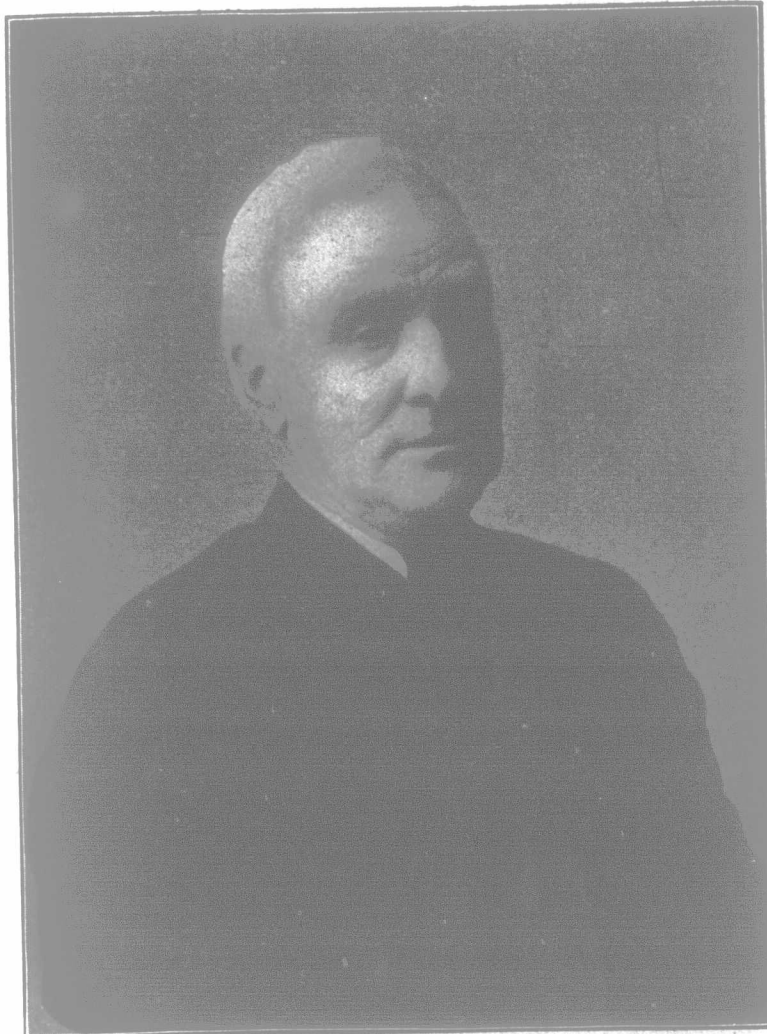
Grain- and Root-fed Canadian Beef.

To the Editor "Farmer's Advocate":

Sir,—I read with great interest the remarks of Ald. Dunn on "The Chilled Meat Trade" in your August 18th issue, and in connection with this important subject beg to send you herewith a paragraph from a letter in the Chicago Live-stock World, bearing unbiased testimony as to the superiority of English and Canadian meat:

"Another great surprise to me as an American, was to learn that the quality of the meats as produced in Britain was far superior to anything to be found on this side of the water, and that these meats were produced by feeding roots and cereal grains and practically no corn. The lean meat found in the English market is much more tender, juicy, and better flavored, and the fat distributed much more intimately with the lean meat, giving it that marbled appearance that is so much to be desired, but never found in the meat of an animal finished largely on corn. Then, too, the fat was of a different character, being fine flavored, soft and edible, in striking contrast to the hard, tallow fat distributed largely on the outside of the carcasses of corn-fed beef in this country. When an attempt is made to eat the fat of beef in this country it rapidly hardens and forms a layer in the roof of the mouth that is very disagreeable. Our people have emigrated from the east, and have a prejudice against anything but corn for fattening animals. They do not know that a finer quality of meat is produced in England and Canada on exactly the same kind and quality of food products as are now produced in the irrigated regions of the west, than can possibly be produced on corn."

A recent letter on Argentine Beef Production shows that competition from that quarter is likely to be in quantity rather than quality for many years to come. The cattle being fed on grass and alfalfa, the beef is



John Miller.
Born May 12th, 1817. Died August 29th, 1901.

watery and stringy, and lacks the fine-grained firmness and richness of grain-fed beef.

Surely, with our magnificent natural facilities for growing roots and cereals in every Province from the Atlantic to the Pacific, with the mild winters in the ranching country of Southern Alberta and Assinibota, and the long start we have in improved breeds, Canada should be able to supply not only Great Britain, but the home market as well, with chilled meats of the finest quality and flavor.

Under the able organization of Professor Robertson, the chilled meat trade should revolutionize the cattle business, now so subject to violent fluctuation in values, and balance the great dairying and allied industries to the advantage of both, by preserving an equilibrium between the two.

Stock-breeding in the great wheat belt will have to be resorted to in time to maintain fertility, as is now found necessary in the famous corn belt of the U. S., and with a steadying of values through organization the growing of beef and mutton may well supplement or go hand in hand with dairying in this wide field.

Compton Co., P. Q.

JAS. A. COCHRANE.

Cause and Latest Treatment of Milk Fever.

Professional men have of late devoted a great deal of time to experimental work on the treatment of milk fever, or parturient paresis, and a great deal of improvement has followed. The treatments suggested by Schmidt, Kolding and Evers have proved exceedingly beneficial, when compared with the old-time treatment, and each has its advocates:

1st—The Schmidt or potassium iodide treatment, meaning udder distension from the use of the iodide or potassium solution. This treatment has numerous variations.

2nd—The Evers or medicated air treatment, meaning udder distension from the use of medicated air.

3rd—The Kussel or oxygen treatment, meaning udder distension from the use of oxygen gas.

Yet, after all, the cause of the disease still remains hidden. The prevailing idea amongst the veterinary profession to-day seems to be that some toxine poisoning has taken place from some source, most likely from the udder or womb. Not denying the theory of the germ affection, through the udder or womb claimed by some, how do its adherents account for the fact that the disease is to be rarely found affecting a poor milker? Would not the udder or womb of the poor milker be as liable to germ infection as that of the big milker?

The writer, after some years of experience in those cases, asks permission to give this idea, one, I may say, which is away from the beaten track. With regard to the cause: In considering the cause, I would ask you to first look at the subjects which we find most frequently affected and those least affected with the condition of the mammary glands about the time of calving. The least affected are heifers at first calving. These you never find affected. Now let us look at the condition of the udder. The strong elastic tissue in the udder is for the first time distended to such capacity that each gland is found firm and globular. The vessel or gland having this support retains each secreting cell in apposition with its fellow of the capillary circulation, and the milk flow is never interfered with. At the second calving the condition of the udder has changed. The frequent distension during the period of milking after the former calving has used up some of the contractile force in that elastic support, and the milk gland is slightly more pendulous, allowing, no doubt, the secreting structure to recede in part from its corresponding anastomotic cells, forming the connection with the capillary circulation of the glands' blood vessels, thus staying the flow of milk or the secretion of its watery parts that we would consider so necessary to carry off the migrating fat cells.

At the third calving we find this disease very prevalent. A second period of milking has weakened those elastic supports still more, and the receding structures, in milk fever cases, are now out of reach unless some help comes from outside. And this is just what occurs in those cases where the animal dies so quickly. All the receding structures are out of reach and the gland not acting, no relief to the engorged system takes place, thus disturbing the cranial circulation, causing the comatose condition and the accompanying flaccid condition of the muscles so very noticeable in those cases.

Now, I do not mean to say that at every subsequent calving the cow is more liable to be affected, but as you are aware it is only the finest milkers that are subjects for this disease, and as the udder often reaches its greatest milking capacity at the third calving, the breakdown is more liable to be then than later. So long as the contractile forces of the elastic tissues remain good the animal will be less liable to contract the trouble.

We see this, too, in the cow which has been suckling her young. The udder retains its

globular appearance, and the firmness of its supports are seen to be more after the style of the heifer's udder prior to calving. This condition of udder I consider is from the fact that the calf sucks often, and in bunting the udder he keeps every secreting cell in apposition. This bunting and sucking allows the gland tissue to retain its normal firmness and the elastic tissue its highly contractile force.

Let us consider what takes place in an animal affected with this disease. The animal seems perfectly normal up to time of calving, and quite often for days afterwards. The calf is born and its blood supply is then thrown on the mother, and according as the gland acts will relief come to the now engorged deoxygenated system. Should the cow be in high flesh she will succumb all the sooner, from the fact that her high flesh has brought with it a fullness of circulation not seen in the less fleshy animal. It might be likened to a stream. Take one running up to its banks and another less full. To each add another rivulet or smaller stream, and the first one will have overrun its banks further up stream. So in the milk-fever patient, the fuller the stream before calving the sooner does milk fever take place after calving. Now, should relief not come—that is, should the secreting structures of the milk gland not all fall in line and do their share, or should they not be in line from want of support—it must be expected that these full blood vessels will cause trouble. The brain being an organ supplied by blood vessels, over which it is considered there is no vasomotor control, its variations in circulation is under the fluctuating arterial tension of other parts of the body. In this way the comatose condition in this disease can be accounted for and its cessation is quickly seen to follow the placing in apposition of the secreting structure of the gland with its adjoining capillary cells of the blood vessel with any of the more recent methods of treatment.

In defence of this theory, I wish to call your attention to just what is really effected by the use of these new cures. The udder is distended by solution, air or oxygen, until every part of gland is made to come in contact with its adjoining cell, bringing about the necessary milk flow; and the weaker the supports the more solution, air or oxygen will be required.

With regard to the first, or Schmidt treatment, I beg to differ with its claims, that the cure is effected by the elimination in the udder of free iodine from the potassium iodide solution used. Such is not the case. I confess to have used different solutions without iodide potassium, and I have met with good results; and if these results are to be gauged by the claim which some make, that all cases which rise to their feet are free from the fever, even should they die afterwards, such cases shall be considered as dying from complication and not from the fever, then I can say that I have relieved from milk fever 19 out of 21 cases—a good percentage, when you consider that no particular antiseptic or absorbent solution has been used.

P. E. Island.

A. A. LECKIE, V. S.

Care of Calves.

The stomach of a calf is delicate and sensitive, and when making a change of food it should be made gradually. Do not change from new milk to skim milk faster than a pound a day, allowing about two weeks to make the change. Be careful to not overfeed. On account of calves being very greedy at feeding times there is often a temptation to give more milk than their stomachs will properly handle, which causes scouring. Overfeeding is undoubtedly the main reason why so many farmers fail to raise good thrifty calves on skim milk. At the Agricultural College we find that, as a rule, calves from three to four months old will not stand more than 18 to 20 pounds daily per head; from seven to eight weeks old, from 14 to 16 pounds, and at from three to five weeks from 10 to 12 pounds; one quart equals two pounds. Calves dropped in the fall are more easily raised, and make better cows than those which come in the spring or summer. Fall calves have many advantages over spring ones. They have not flies to bother them in their young days, and when grass comes in the spring they are of proper age to be weaned, and when turned on the grass their growth is constant; while the spring calf, in many cases, goes into winter quarters to be half starved, and when turned on the grass the next spring is often smaller than when six months younger, and when full grown it will be six months behind the calf dropped in the fall.

Dufferin Co., Ont.

A. A.

Better than \$100.

Mr. Neil McPherson, Queen's East, P. E. I., says: "I am an old subscriber. I am getting the 'Farmer's Advocate' over thirty years, and if you had given me one hundred dollars at the first instead of the paper I would not be any better off. You can see I took something from the paper. Now I may not live to see the next year, for I am only sticking together. Since the 'Farmer's Advocate' has come to be a weekly it is worth a lot more. I can see something 'new every week.'"

Sheep Notes.

Profit in sheep depends largely on keeping them always in good condition.

Cold never injures a mature, healthy sheep if it is kept dry.

By having the ewes in good condition when bred, they are more certain to breed and do well and produce a large percentage of lambs.

A number of old and unthrifty ewes will often make a material difference in the possible profits.

A small amount of wool, or even of mutton, often represents the difference between profit and loss.

In commencing to feed sheep grain, feed a small quantity at first, and gradually increase. Oats are preferable to commence with, and should form part of the grain ration at every stage of feeding.

Do not keep the sheep on the pastures too closely now. If allowed to eat the grass plants down too closely, much injury may be done.

A little good feed, mixed with a good deal of thoughtful attention, is what makes the flock pay best.

Sheep of different ages and conditions should be sorted out into separate flocks, and the weaker ones have a little extra feed.

In attempting to cheapen the cost of rearing the flock, the wool and the carcass should not be forgotten, but let them be improved steadily each year.

Be careful to select a strong, thrifty ram, of good type, and secure him early in the season, before the best have been picked up.

FARM.

Do Lightning Rods Protect?

To the Editor "Farmer's Advocate":

Sir,—I read with much pleasure your timely article on lightning protection, in the issue of August 18th. It was timely in more ways than one. First, because there is a great deal of haziness in the minds of most people on the question, and also because, not only has there been a great deal of lightning-striking during the summer, but between the time the article was written and its publication, a severe storm passed over the country, during which, in one township near London, two barns and contents were burned.

I have become a firm believer in lightning-rods, and I think with good reason. First, from what I have observed. On the Wellington Road, leading south from London, one of the telephone poles was struck, which happened to have nailed on it in a slanting direction, a tin advertising sign. The usual three-cornered sliver was torn out of the pole, until it came to the upper end of the sign, when, instead of continuing its course directly to the ground, the current had gone on to the tin, and from the lower end of the sign, on the opposite side of the pole, the sliver was begun again, and, keeping exactly in the grain of the wood, reached the ground. The pole underneath the tin was untouched. Who will dispute the statement that if a strip of tin had been tacked to that pole from top to bottom the pole itself would have been unharmed. Rather more than a year ago the Glendale Methodist Church was struck by lightning. A miniature steeple was the first point touched. From the base of the steeple a strip of shingles about two feet wide was ripped off one side of the roof ridge for a distance of twelve or fifteen feet, stopping directly above a truss rod, which extended from the peak of a pair of principal rafters down to the lower side of a beam in the ceiling. Down that rod the lightning had gone, not affecting the timbers through which the rod passed, until, having reached the nut below the beam, it slivered the beam in its course to another rod which hung from it and held up the stovepipe. Down that rod, along the stovepipe, and to the stove, the lightning ran. The stove door was propped shut by a heavy poker, whose lower end rested against the wainscoting at the floor. The wainscoting was split considerably, and where the poker rested was scorched, as was also a broom standing near, but not fired. The course of the current, then, was through the brick wall and stone foundation, both of which were shattered a good deal, in a downward slant to the ground. Had that poker reached from the stove down through the floor to the earth below, there is no doubt, I think, that the wainscot and wall would have been untouched. And had the truss rod extended up through the roof, and along the ridge to the steeple, the shingles would have been unharmed. But that would just have been a lightning-rod, though of a rather peculiar formation.

The above examples show clearly that where lightning has iron to run upon, it will leave unharmed the other materials. Another example to show that it will go out of its way to get to iron: Near the house of John W. Robson a tall poplar tree was struck, and the track of the lightning could be traced to the roots. About seven or eight feet from the poplar stood a spruce, around which was fastened one end of a wire clothes-line. A part of the charge had evidently left the poplar tree for the clothes-line, for the spruce tree was cut off as cleanly just above the line as if shot off

by a cannon ball, and a buggy-shed to which the other end of the line was attached was split up some. I could quote from the observation of others, numerous instances of the ground at the foot of lightning-rods being torn up, showing that a charge had been safely carried off; of points fused, of uprights softened until they lopped over on the roof, of rods burned in two, etc., but I have not myself seen such.

Second, from the opinions of those most competent to judge. I met an acquaintance the other day who said: "Neither you nor any other man will ever convince me that a lightning-rod is any use." Whether his opinion was well grounded or not, in the true sense of the term, it certainly was in the sense of being deeply rooted. This opinion is not given as an authority.

Sir Oliver Lodge, of Liverpool, one of the first electricians of the age, as reported in 1897 by Mr. John Dearnness in the "Farmer's Advocate," said, speaking of rods made of galvanized fence-wire: "A building whose highest lines and all projecting points were thus protected by single wires or loose cables terminating in damp ground would be well guarded."

J. Howard, Hunter, Inspector of Insurance for Ontario, who has exceptional opportunities for forming correct judgment in such matters, in a letter to the "Farmer's Advocate," the same year, said that if our farmers would themselves rod their buildings, "the present deplorable and wholly unnecessary destruction of farm property by lightning will soon be at an end."

Third, from statistics: During the storm of the 13th inst., already referred to, two barns were struck by lightning in the township of Caradoc, and, with their contents, were totally destroyed. No rods on either. In the adjoining township of Lobo, the same evening, two barns were struck—that is, the lightning-rods on them were struck and re-polished; the buildings themselves were untouched. The township fire insurance company of Lobo has been in existence for twenty-two years. During that time—this on the authority of Arch. Sinclair, agent of the company—they have paid for twelve barns destroyed by fire. Of that number nine were set on fire by lightning, three from other causes. Not one of the barns fired by lightning was equipped with rods. Mr. Sinclair said, however, that the barns which were built in their stead were so fitted up without delay. The Company has never had to pay for any damage done to buildings by lightning where rods were in use.

Allow me here to digress slightly. I called, about a fortnight ago, upon a Westminster farmer, who gave me the following: his barn, with contents, was burned by lightning, August 31st, 1881, during a storm which left a trail of burning buildings through the township, and almost exhausted the comfortable surplus which the local insurance company had been accumulating for years. By the way, none of these buildings destroyed were rodged. After the fire, when he had rebuilt, two lightning-rod agents called upon him. They sympathized deeply with him in his great loss, and were desirous of protecting him against such loss in the future. They did not want him to tell anyone about their offer, as it was very low, just sufficient to cover cost, but they would rod his barn and house for \$285.00. He paid no attention, but continued making the hayrack on which he was at work. After a while one of them took him aside and offered to do the job for \$100 less, even if he lost by it. No response. They continued to come down in their terms, until at last they proposed to do it for \$85. He opened the gate, and said, "Gentlemen, you may go." A few years after, this barn was, with all it contained, except his horses, which were got out, completely burned up by lightning. The third barn still stands, but when I stated I could rod it for about \$10, he declined to have it done.

The manager of the London Mutual Fire Insurance Company, as reported in the "Farmer's Advocate" for September 1st, 1896, made this statement: This Company carries farm risks to the amount of \$15,000,000 annually. In an experience of thirty years, on only two or three occasions have they had barns struck that were rodged, but they were not burned. The Company's losses from lightning fires averaged \$26,000 annually for the past five years, but in no case were they on protected buildings.

In the report of the meetings of the Mutual Fire Underwriters' Association of Ontario, Feb. 23rd, 1903, page 3, the following is found: "Losses," being damage to buildings, or buildings destroyed by lightning: Number of losses reported, 296; amount of loss reported, \$27,456.93; number of these buildings equipped with lightning-rods, none.

On the other hand, it cannot be denied that there have been some cases of lightning fires where rods were in use, some of which cannot be explained in any other way than that they are exceptions to what is a general rule. The overwhelming evidence, however, is in favor of rods as a protection.

The point to which I have been leading, how

farmers may themselves, at little expense, fit up their buildings with efficient rods, I must leave for another week, as my letter is already long enough. No mistake will be made by anyone, though, if they follow the instructions given in your article of two weeks ago, though I will suggest what I consider some improvements on the method there recommended. T. BATY. South London, Middlesex Co., Ont.

Cement Floors.

When laying a cement floor in stable or cellar, it is not necessary to first make a foundation of six or eight inches of broken stone, as many people suppose. A foundation of that kind may be necessary to furnish drainage for an outside floor, such as a hogpen, but in a barn with walls properly drained it is unnecessary. Dig off the surface soil and loose matter until solid, well-settled earth is reached. Fill in the uneven places with broken stone or earth well packed. Grade the surface to the form desired, leaving about 1 1/4 inches fall from manger to gutter. Where you want the posts place a stone with an eight-inch iron bolt standing upright in it; a hole is bored in the bottom of the post and it is set on this dowel, just clearing the floor, so it will not rot with the moisture. Dig the trench for the gutter, keeping the bottom perfectly level; the liquid must be absorbed by the straw, or whatever bedding is used where it is voided. Tanks and cisterns for holding the liquid manure are impracticable and unnecessary for the average farm.

Fine gravel, perfectly free from soil, is needed. Sand may be used, but as the object is to have the floor in a stable wear slightly rough to prevent the cattle from slipping, sand in its pure state is not satisfactory, although the floor may be roughened while still fresh by the use of an old stub broom. Sand is all



Callonell and Sea Bird.
Prizewinning Standard-breds. First in roaster class and first for gentleman's pair, at Dominion Exhibition, Winnipeg. Owned by J. T. & J. H. Wilkinson, Chilliwack, British Columbia.

right for a cellar floor. Rock cement will do, costing about \$1 a barrel, but I prefer Portland cement. When the comparatively small proportion needed of it as compared with other cements is considered, it does not cost much more in the long run. Portland cement should always be used for outside floor work, as for a feeding floor for pigs, where frost and moisture together are frequently present.

Mix the sand or gravel and cement thoroughly, first dry and then wet. Use one measure of ordinary cement to two parts gravel, or one part Portland cement to seven parts gravel. Be sure to get the mixture uniform; do not spare time nor work at this important stage. Lay the floor all at one coat, three inches thick; two inches thick will do in the mangers and feeding alleys. Use a three-inch plank as gauge. Lay it across one end of the floor about two feet from the wall, and fill in the space with cement; as this stiffens, shift the plank another two feet and add another course, and so on.

Lay the floor of the gutter, then place on it a box form and fill in on either side to the level of the main floor. Round off the edges. As each course is laid, float off the surface with a board, so as to leave it slightly rough. Shut up the doors and windows to keep out the sun, frost, wind and animals, and wet it every day for a fortnight, to prevent it drying quickly, and do not use for one month.

When making a feeding floor for hogs, lay about ten inches of stones and gravel for a foundation, and then place on this a coat of gravel and Portland cement, one part cement to ten of gravel. Then at once, before it dries at all, apply a one-inch coat of cement and sand and fine gravel mixed, one part Portland cement to two of gravel. Roughen the surface as described above. J. Lincoln Co.

Production and Selection of Seed Corn.

A recent estimate of the number of acres producing corn during the present year in Ontario is given as follows: Corn for husking, 329,882 acres; corn for silo, 193,115 acres. To give anything like an accurate estimate of what this acreage will produce would be a very difficult matter, but certain it is that the total yield, both of grain and fodder, will be far below that of last year. The reason for this condition of things may be attributed mainly to two factors, viz.: the unsuitability of last year for the production and harvesting of seed of uniformly good quality, and unsatisfactory climatic conditions which have prevailed for the greater part of the present year, and which have very materially affected the successful growth of such corn as may have had a good start.

Generally speaking, people are extremely careless in their methods of selecting and storing their seed corn, or, in case it be purchased from a second party, they are just as careless in ascertaining where and how that seed was produced and stored. It is very natural, therefore, that the prevailing conditions of the corn crop should be found to be as they now exist. On the other hand, there are to be found some who HAVE given this question all due attention, and who are, therefore, well repaid for their care, but it is a matter of regret to know that this number is lamentably small. Again, there are others, and these far outnumber the rest, who, although they may think they are sufficiently careful with their seed, fall far short of the mark, and any defects in the resulting crops will be attributed to other conditions. They do not realize, when storing the seed, how delicate a thing the embryo or germ of a kernel of corn is, or how susceptible it is to low temperature when accompanied by moist conditions. They should, therefore, test all the seed they sow, and learn to know the difference between a dead seed and a live seed, and to see that only the latter is placed in the ground. The observant grower will subsequently learn to see the difference again between the ultimate product of the live seeds, and it is our endeavor to point out the importance of the fact that there IS a difference, and to assist the grower in turning this difference to good advantage. To quote the words of Prof. Holden, of the Iowa State College: "All that we ask is that the farmer put as good a strain in his cornstalks as he puts in his cattle. The farmer will go to the expense and trouble to put the bluest blood in

his cattle, but will dump into his corn-fields the first seed that comes to his hand." The principles of breeding, found as truly in plants as in animals, are too often ignored, and more especially that all-important one which forms the basis of all improvement, viz.: "that like begets like." If an ear of corn possesses certain undesirable characteristics, or has been produced by a mongrel plant, which has never been improved in any way, or if it has been brought into existence through the fertilization of the female, of which the silks form a part, by the pollen from the tassels of a barren or an inferior plant, it will have no prepotency save that which will tend to reproduce its own undesirable characteristics. Hence, little can be expected from seed which has "no breeding," so to speak, behind it. It is a matter of surprise to many that by careful counting the corn-breeders of the United States have found that the average percentage of barren stalks reaches thirty. The writer has made a particular study of this very point in Ontario during the present summer, and found in some cases even a higher percentage of these stalks than that reported by our American friends, although the average over the Province would be considerably lower.

Progressive dairymen are continually weeding out from their herds the unprofitable cows, which not only fail to return a profit, but greatly reduce the average of the whole herd, and absorb that afforded by their more profitable companions. Is there not just as strong an argument in favor of eliminating the tendency in corn to produce unprofitable plants? It should, therefore, be kept in mind that one inferior seed ear means a whole colony of poor ears.

Now is the time of year when farmers who grow their own seed or aim to supply others, should make a study of their corn crop, in view of securing seed ears of a desirable type from the growing plants, paying special attention to these plants from which the selections are to be made. As corn is known to "cross" readily, one variety with another, the grower should see to it that the field on which he is depending for his seed corn be sufficiently isolated from all other varieties. To put it briefly, the successful grower of seed corn should aim: First, to secure seed of a uniform type, free from intermixtures with other varieties; secondly, to select the ears from those standing plants which possess a strong and vigorous individuality in a marked degree; and, thirdly, to store that seed in such a way that its vitality will be in no way impaired. This work is carefully systemized by the officials of the Canadian Seed-growers' Association, Ottawa, which aims to furnish all information and keep careful records of all work done by its members, the object being the production of pure-bred seed having a valuable and reliable pedigree behind it.

That pure-bred seed will increase the yield per acre is now regarded as beyond all question by those who have made a special study of the matter, and we can find no more reliable authority than that given by some of our practical, businesslike growers of seed corn. The method of producing this seed is so simple, yet, withal, so scientific, and the possibilities so great that it cannot fail to appeal strongly to all progressive corn-growers. For the benefit of those who are taking up the work of corn-breeding, the Association emphasizes the importance of several points, which should be carefully considered: First, it points out the importance of ascertaining what variety is best suited to the locality, and to the purpose for which it is to be put; and, secondly, having decided upon the variety, spare no pains in securing the very best possible seed which has a record for successive large yields from large, well-developed plants. It is, therefore, obvious that the time is at hand when the present crop should be studied with a view to securing the best possible seed ears when mature for next year's crop.

As has been already stated, the plot of ground used for the growing of seed corn should be isolated from all other varieties. If the work is being carried on under the direction of the Association, the minimum size of this plot is placed at twenty rows, with fifty hills in a row, all hills to be at least forty-two inches apart each way. It is required that each selected ear plant a separate row, and that before planting an accurate record of the characteristics of each ear to be sown be made on suitable blanks supplied by the Association. It is also important to shell or break off the tips of the ears before planting, discard those grains, and to plant in such a way as to insure three good plants per hill. During the summer the plot should be kept clean and thoroughly cultivated, the aim being to produce the best possible individual plants. As the tassels are coming out, great care should be exercised to go through the plot every other day and remove all of those tassels which are borne on barren or inferior stalks. At the Illinois Experiment Station, as a result of this weeding-out system, which had been carried on for five years, the percentage of barren stalks has been reduced from 60 per cent. to 12 per cent.

Each row should be husked separately, and the seed ears chosen from those rows producing the largest proportion of good ears true to type. The ears which have produced these rows must be prepotent, and this is a characteristic which we aim to perpetuate.

While I would not in any sense underestimate the value of work done by many farmers in their endeavor to improve their seed, still I think all will agree that by following a systematic method, such as has been outlined above, there will be a greater promise of enjoying a much greater remuneration. In conclusion I may say that the Canadian Seed-growers' Association makes this plea in behalf of better methods in improving seed corn, in order, first: That a large number of growers may share in the benefits, and; secondly, that those who have to buy may be afforded an opportunity of securing seed having a reliable pedigree or history attached.

Seed Division, Ottawa. L. H. NEWMAN.

[Ed. Note.—Experienced corn-growers, while fully recognizing the importance of improvement of varieties, emphasize the absolute necessity of thoroughly drying the ears selected for seed, in order to preserve its vitality, and to this end suspend them over the kitchen stove until they are thoroughly dried. This is especially necessary in the case of corn grown in a wet season, such as was experienced last year, the failure to observe this precaution accounting largely for the lack of vitality in the seed corn sown this year. The same condition prevailing in the present season, the importance of carefulness in drying the seed for next year's planting cannot be too strongly urged.]

Quebec Weed Laws.

Noxious weeds, such as daisies, thistles, wild endive (Cichory family), chicory, celandine (Poppy family), and plants considered as such, which grow upon municipal roads in Quebec Province, must be cut down and destroyed between the twentieth day of June and the tenth day of July in each year, by persons who are bound to keep the roads upon which they are found in repair. Any person may, by special notice, require any owner, occupant or holder of any land or common, not actually under seed, to cut and destroy, between the twentieth of June and the first of November, the daisies, thistles, wild endive, chicory, celandine, and all other noxious weeds or plants considered as such, growing on the said land or common. In case of refusal or neglect, any justice of the peace may, eight days after notice has been given, condemn the delinquent, upon complaint supported by the oath of one credible witness, other than the complainant, or upon the confession of the party prosecuted, to a penalty of forty cents for every day he so refuses or neglects, over and above the costs and charges incurred in obtaining such judgment, and such judgment shall be rendered in a summary manner.

Any person who scatters, or causes to be scattered the seeds of weeds, to the prejudice of another person, shall incur a penalty of not less than one or more than eight dollars.

Any person may, after special notice, compel his neighbor to pull up wild mustard and daisies, even in a sown field, as soon as they flower, under the penalty mentioned in the preceding paragraph. The special notice required, as mentioned, shall be given during eight days, and either in writing or viva voce before two witnesses, whose evidence shall be proof thereof. If the notice be given in writing, it shall not be necessary to adopt any particular form; it shall suffice that the purport of the notice be set forth in an intelligible manner; that the notice be dated and attested before two witnesses or a notary, if the person giving it be unable to sign it; and that it mention the official capacity, if any, of the signer.

These laws for the suppression of noxious weeds do not often require summary enforcement. As a general thing, the farmers keep the roadsides adjoining their property cleared, and frequently the municipal authorities cut brush and weeds on the roadsides where it has been neglected to be done. The "selected seeds" movement will have a tendency to make up-to-date farmers look upon not only their own but their neighbor's weeds with more concern, and what has hitherto been law in letter only is likely to be called into requisition more and more as this movement spreads.

"COMPTON."

Effects of Clover.

The work of clover is not always to get nitrogen from the air. There are some soils that are rich enough in nitrogen, and yet need the presence of the legumes. Clover does its work of soil-renovation partly by its roots going deep into the soil and helping to improve the physical condition of the soil. It taps the stores of potassium and phosphorus that are hidden away in the depths of the earth, and brings them to the upper layers of soil, where they will be within the reach of the plants that do not have the deep-root systems that clover and alfalfa have.

Clover is found to be useful on almost all soils where it will grow, either as a collector of nitrogen or a subearth cultivator. It sends its roots deep into the soil, and tunnels in every direction. The roots in time die, leaving a multitude of passages in the soil. These act as drains and as air channels, by which the soil is more fully aerated. As a nitrogen gatherer, clover is of great use on millions of acres of lands from which the nitrogen has been exhausted, and on millions of other acres it acts as a carrier of fertility from the cellars to the upper storage rooms of the soil.

Victoria has Plowing Matches.

"Maritime" asks some of your readers to give, through the "Farmer's Advocate," an idea about plowing matches. Now I have had some experience with such matters, being President of the Plowmen's Association in the County of Victoria for several years. The plowing match is the best educator that can be brought before the public. To any man or boy it is the best educator he can have. As to the time of year for holding them, we consider late in the fall, when the ground is soft with fall rains, when the land turns nicer and the work done must show taste or it loses interest. As to the prize-list, we have three classes for men and two for boys. First class, men in sod, and second class, men in sod, and third class, men in stubble. Boys—two classes—boys 16 years and under, and boys 18 years and under. Prizes must be arranged according to the money on hand. We get generally \$100 from the county, and with a little canvassing easily raise it to \$200, which makes prizes worth competing for. AN OLD SUBSCRIBER. Victoria Co., Ont.

Secures Two Years' Issues.

Mr. John Harcourt, Lincoln Co., Ont., says: "I am well pleased with the paper. Enclosed you will find order (\$8.00) for this and next year's subscription to the 'Farmer's Advocate.'"

Plowing and Plowing Matches.

Sir,—In your issue of August 18th I saw a question asked by "Maritime," wanting information re plowing and plowing matches. Here in the Province of Quebec, County of Hochelaga, we have a match every year, generally about the 26th October, after all the root crops are harvested, so that people have more leisure time to attend the match, which is always looked forward to by young and old with a good deal of interest. A good locality is chosen, with uniform ridges of twelve feet in width, varying in length from fifteen to twenty rods. Plowmen are allowed seven and a half or eight hours, according to length of round, to perform their work. The prizes are always good, thus tending to draw out competitors. It is a noticeable fact that those who follow these matches always have their plowing well done at home, thus showing the advantages to be derived, and to quote the words of Lord Beaconsfield, "Anything well done is twice done," is a maxim which might well apply to plowing. The chief points to be observed and carried out are a uniform depth of plowing, generally about six to six and a half and seven inches in width, according to the plow one uses. Land must be well packed, and all grass covered. Classes are generally four in number, first class, second class, and young men under 21, also the retired class for plowmen who have not plowed at a match for five previous consecutive years. Plowmen, as a rule, shall plow all their land themselves without aid from outsiders, excepting in the setting of poles and measuring of ridges, etc. Two or more competent men are chosen for judges. Prizes are also given for neatest and cleanest team and harness. All rules should be explained on the grounds before starting, and should be strictly enforced. Should "Maritime" desire a copy of rules and regulations as set down by the "County of Hochelaga Agricultural Society," or any other information relating to plowing matches, I might say he would be furnished with same with pleasure. We also invite him to attend our match this autumn, the date of which will be published in due season. WM. LENEY.

Maisonneuve, P. Q.

The Rot of Potatoes.

An Ontario County reader asks the following pertinent questions regarding the disposal of potatoes affected by rot:

"The potato crop in our neighborhood is badly diseased, some kinds being almost a total loss. What is the best way of disposing of the diseased potatoes? If allowed to remain on the ground, would spores of the disease remain in the soil? I should say that with us a large garden is planted in potatoes from year to year, and in spite of the recurrence of the same crop, the yield was very fine both in quality and quantity till the disease took them. Only a few days elapsed from its first appearance till they were badly infected, the heavy rains seeming to favor its development. I heard that some of the neighbors do not intend to dig their potatoes, and one has consigned his to the manure heap. Are they acting wisely?"

The spore of the late blight of potato (*Macrosporium solani*) certainly remains in the ground over winter, but perhaps there is no better place for them, provided the same land is not planted to potatoes the following year. The decayed potatoes should not be thrown upon the manure pile or fed to stock if the manure is to be applied to land intended for potatoes. Where the crop is not worth digging, or where a large percentage is rotted, they had better be left on the field and two or three other crops grown before again planted to potatoes. The spread of the potato blight is one of the most emphatic arguments in favor of spraying with Bordeaux mixture several times during the season.

Bigger and Better Than Ever.

There is every indication that the Central Canada Fair this year will far excel all previous shows. The special attractions are unusually excellent, and the exhibits promise to be far ahead of those previously made. Judging by the way the entries are coming in, every stall in the live-stock buildings and every part of space in the other buildings will be taken up. The dog show building will also be completely filled.

In the main building over fifty per cent. of the exhibits will be new, and will include splendid displays by the biggest and best manufacturing firms in Canada. Already over 100 stalls in the horse buildings have been allotted.

The grounds and buildings have been greatly improved since last year, and the staff of workmen are now giving the finishing touches. The secretary says in every nook and corner of the grounds there will be an attraction of some kind, and is confident that patrons will see an exhibition that will eclipse all past shows. The exhibition will be thrown open to the public on Monday, Sept. 19th.

The Production of New Varieties of Wheat.

By Chas. E. Saunders, Ph. D., Experimentalist, Exp. Farm, Ottawa.

It is necessary at the outset, in treating this subject, to define clearly what is meant by a VARIETY of wheat, since the term is often incorrectly used, being employed in the sense of a GRADE or QUALITY. A couple of quotations will make this clear. In a recent issue of a Canadian agricultural journal, the following sentences appeared:

"It is true that our standard grades do not cover all the varieties of wheat we produce. Bad weather, smut, bad handling, bin-burning and other minor causes must be provided against, but for these we have commercial grades." Here it is evident that GRADE and VARIETY are regarded as interchangeable terms. Again, the author of a recent work on milling says: "American winter wheat is another variety," and elsewhere he speaks of "the best, or No. 1 variety of wheat." These quotations suffice to show the extreme carelessness with which the term "variety" is used.

One sometimes hears the opinion advanced that one variety of wheat can be changed into another by being grown for a season or two in a different soil or climate. Undoubtedly, some changes can be brought about in this way, but they are not changes affecting any of the intrinsic characteristics by which varieties are distinguished. Red Fife, for instance,

may be hard or soft, according to the conditions under which it is grown, but soft, starchy red Fife is still perfectly distinct from white Fife, although anyone not accustomed to studying varieties might be puzzled for a time by the resemblance between the two.

Stockmen have clear ideas on the subject of varieties in cattle, and a proposal to change Jersey cows into Shorthorns by making them excessively fat would scarcely receive serious consideration. These two varieties are recognized as fundamentally distinct—a fat Jersey is still a Jersey, even though some careless, uninformed observer might mistake it for an animal of some other breed.

It will be well for farmers when equally definite ideas prevail in regard to varieties of grain. At present there is a tendency to ignore the fundamental points of difference, those points by which varieties can be distinguished, no matter where they have been grown. Just what these points are, it would be going beyond the limits of this article to discuss, but among the most important may be mentioned the form of the head, the presence or absence of awns, and of down on the chaff, color of chaff, color of the bran and flour, and the quantity and quality of gluten obtained from the flour. To these might be added earliness, yield, length of straw, etc.—important characteristics, though less easily determined. A difference in variety is, therefore, a difference in regard to such points as have been just enumerated. Hardness or softness of kernel is a character of little use, as a rule, in distinguishing one wheat variety from another.

If we now clearly understand the meaning of the term variety as applied to wheat, we may pass on to consider the three chief ways in which new varieties are produced. These are:

1. By selection.
2. By accidental sports or crosses.
3. By hybridizing and crossing.

PRODUCTION OF NEW VARIETIES OF WHEAT BY SELECTION.—Strictly speaking, a new variety is not PRODUCED, but is merely SEPARATED OUT by selection. If a so-called

variety consists, as is often the case, of several distinct types, it is clear that something UNIFORM (and which may, perhaps, fairly be called NEW) can readily be produced by picking out one particular sort from the others. Wellman's Fife wheat was produced in this way, by separating out from a field of mixed wheat some of the largest beardless heads. Some mixtures of wheat received at this farm from India, have been separated into a number of distinct varieties, each of which must, of course, receive a new name if it is to be introduced for trial in this country.

On the other hand, when an effort is made to produce a NEW variety by the selection of strong plants from a pure sort, already true to one type, it is doubtful if the claim of NEWNESS can be admitted. Haynes' Blue Stem and Power's Fife are cases in point. The former is a good strain of Blue Stem, and the latter a good strain of Red Fife, but in general cultivation it is very difficult, perhaps impossible, to distinguish them from the original varieties. The selection of good heads and of good kernels, no doubt, leads to the production of larger crops, but it can scarcely be said to give rise to new varieties of grain.

PRODUCTION OF NEW VARIETIES FROM ACCIDENTAL CROSSES OR SPORTS.—Although it is commonly stated that wheat is strictly self-fertilized (that is to say, that every kernel is fertilized by the pollen from its own blossom), natural crosses of hybrids of wheat are

crosses which he has thus far produced. This is depicted in two of the accompanying plates. In the year 1900, pollen from Polish wheat was applied to a flower of Red Fife, and the resulting kernel was sown the following year. This gave the plant which bore the head marked No. 6 in the plate. The seeds from this head were sown the next year, and gave rise to all the types shown in the second plate. The following year, still further variations occurred, and even in this season (the fourth) some of the strains are not yet fixed. All together there have been produced from the single original (hybridized) seed about forty varieties of wheat. This example will give some idea of the splendid possibilities afforded by hybridization in originating new varieties of wheat, and will serve also to demonstrate the necessity for rigid selection for several years after a cross has been made, in order to obtain the best possible results.

By such a process as this most of the new varieties introduced from the Central Experimental Farm have been produced. They are chiefly crosses of Red Fife with some earlier-ripening variety, made with the object of combining the well-known excellent qualities of Red Fife with the earlier-maturing habits of various foreign wheats.

In order to test the possibilities of a second cross with Red Fife (making the varieties three-quarters Red Fife, so to speak, instead of one-half), the writer, in 1896, crossed Dawn with Red Fife, and Rideau with Red Fife. The parentage of Dawn is Early Sonora x Red Fife, and the parentage of Rideau is Spiti Valley x Red Fife. Dawn and Rideau are both fairly early in ripening, but are in some respects inferior to Red Fife. From these second crosses many new varieties were produced, about twenty of which were in cultivation this season. They seem now to be quite fixed in type, and as they mature before Red Fife, and are of excellent quality for flour-making, they may prove of considerable value. As would be expected, they closely resemble Red Fife, and when threshed would pass for that variety. A photograph of a head of one of the best of these new sorts is shown in the accompanying plate.

During the last two seasons, the work of crossing and selection at the Central Experimental Farm has been greatly extended. Over four hundred new cross-bred sorts of wheat were in cultivation this summer, and it is expected that a very much larger number will be grown next year. A couple of hundred interesting selected strains of wheat were also grown this past season. From these some very important returns are looked for in the course of a few years. The scope offered for such work is almost limitless, but the processes are necessarily slow, and both the experimenter and the public have need of considerable patience.

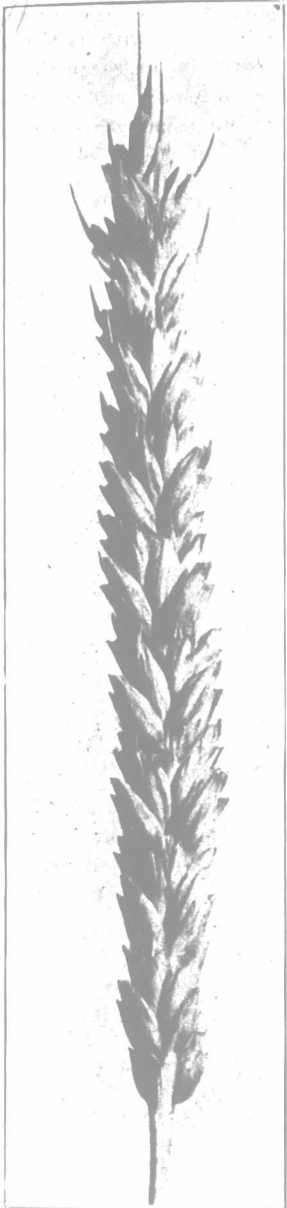


Plate 3.

Cross-bred wheat—Rideau x Red Fife. Natural size.

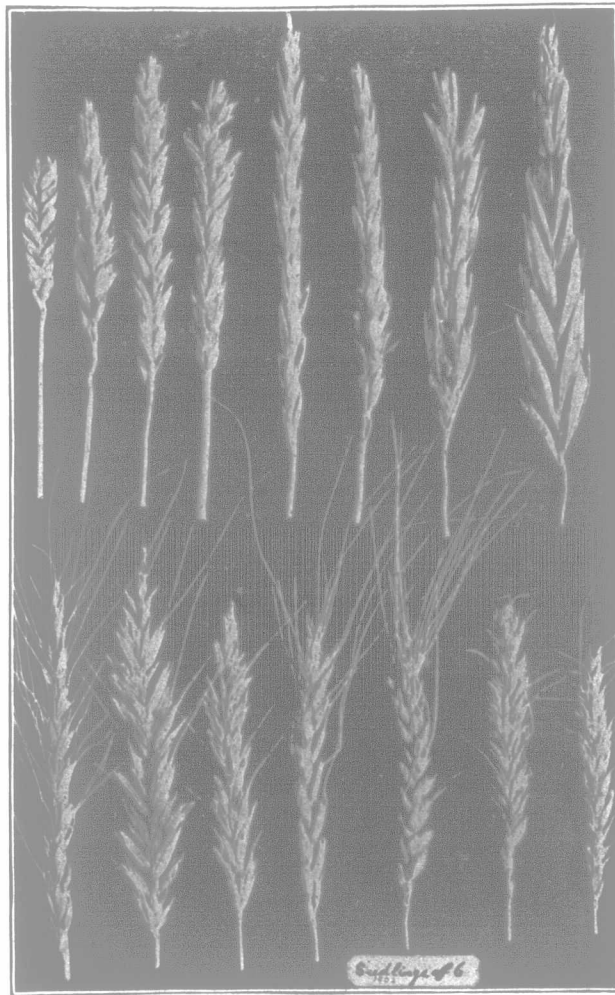


Plate 2.

Reduced one-third

undoubtedly produced at times. Several instances of probable natural crosses have been observed, and during the present season the writer has added at least one to the list of undoubted cases of this kind. The occurrence of natural crosses is, however, as far as we know, uncommon, and new varieties of wheat are not often produced in this way. Sports (i. e., plants which differ from their parents) may occur in wheat, apart from the results of crossing, just as they appear among roses, chrysantheums, etc., but the writer is not aware that any unquestionable cases have yet been observed.

PRODUCTION OF NEW VARIETIES BY HYBRIDIZATION, OR CROSSING, AND SELECTION.—The best method for producing new varieties of wheat is by hybridizing, or crossing followed by selection. The operation is simple in principle, though difficult in manipulation, and consists merely in carrying to a wheat flower of one variety the pollen from a second sort which we wish to use as the other parent. Care must be taken, of course, that no pollen other than that which is being artificially applied reaches the flower in question. If the seed sets as a result of this operation, we have a kernel containing in itself the possibilities of both varieties, and from which varied types are almost sure to be produced in the course of two or three generations. As illustrating this point, the writer has selected a case which is, to the eye, one of the most striking to be found among the (nearly) five hundred



Plate 1.

Reduced one-third.

DAIRY.

Condensed-milk Factory Regulations.

Those who live in those parts of the country in which cheese factories abound are, perhaps, only too well acquainted with the periodical complaint which, in the majority of districts, arises, with most painful regularity at greater or lesser intervals, in regard to some branch of the business. If the factories or the makers are not in fault, the patrons are, the cheese turned out is of inferior quality, etc., and so on. Licensing, with systematic inspection, and instruction, has been proposed, and was recently discussed in the "Farmer's Advocate." This plan is still in the "serious-consideration" stage. In the meantime, we have thought it not an inopportune moment in which to tell of a set of regulations, in force over a comparatively small area, it is true, that of the condensed-milk factories of the Dominion, yet which, having proved eminently satisfactory throughout that area, have qualified themselves to be considered as applicable, at least in part, in the cheese-factory districts. Take, for instance, the code of regulations issued from the St. Charles Condensing Factory, Ingersoll, Ont. The conditions which govern the production of a perfect article in the condensing factory, though more stringent, are practically parallel with those which govern that of an equally satisfactory article in the cheesemaking.

The regulations, in as brief a form as possible, follow, and but a cursory review of them will be necessary to show the thoroughness with which they map out the course for every branch of the patron's work, and the certainty with which a strict enforcement of them must keep things moving along right lines, thus preventing dissatisfaction upon the side either of the factory or the patrons. According to the contract which each patron of the factory must sign, the rules are substantially as follows:

1. The patron must agree to deliver to the factory, at a specified hour daily, a certain number of pounds of strictly pure, wholesome, unadulterated milk.

2. He must agree that the milking of his cows shall be done in the most cleanly manner, the milk being strained through wire-cloth strainers of one hundred meshes to the inch, and thoroughly cooled, immediately after being drawn from the cow, by being stirred until the animal heat is expelled, the temperature being reduced to fifty-eight degrees inside of forty-five minutes, by the plunging of the cans into pure, clean cold water, which must be sufficiently deep to come up to the height of the milk in the can. The vat must contain three times as much water as the milk to be cooled, and, in cold weather, every precaution must be taken to prevent its freezing and that of the milk, whose temperature must not be less than sixty degrees when delivered at the factory.

3. The cans must remain in water until the time arrives for hauling it to the factory. The milk must be transported on suitable spring wagons, and the cans must be covered with clean canvas covers.

4. The room in which the milk is kept and cooled must be used for no other purpose. It must be properly ventilated, and must be apart from the stables, its door opening in all cases from without.

5. The milk and cans must be kept absolutely clean, the cans being thoroughly rinsed with clean water before any milk is put in them. The night's and morning's milk must not be mixed, with the exception of the strippings, which may be kept in a separate can.

6. The patron must deliver all the milk, including the strippings, to the factory at the first delivery made after the milk has been drawn from the cows, and shall offer no milk for delivery which has been taken from a cow within ten days after or sixty days before calving; nor from any cow which is in an unhealthy condition.

7. The can, when not in use, must be kept turned down, and with covers off, on a rack, which shall be at least three feet from the ground.

8. Immediate notification must be given of any occurrence of infectious disease in a household from which milk is sent to the factory.

9. Especial care shall be taken to keep the stables thoroughly clean, and to prevent dust of any kind from entering the milk pails while milking is being done.

10. Cows shall not be fed on turnips, ensilage, wet or dry barley sprouts, brewery or distillery grains, or any feed which will give a disagreeable flavor to the milk, or which will not produce milk of standard richness.

11. The factory representatives shall refuse milk which has been injured in any way by carelessness.

12. Inspection by a veterinary or sanitary inspector shall be made whenever deemed necessary, and any cow which is found to be suffering from contagious or infectious disease shall be removed from the herd. It is agreed, however, that there shall be no needless sacrifice in any herd.

13. Inspectors or representatives of the factory

shall at all times have access to the stables, etc., and to the place for cooling the milk, and keeping the pans and strainers.

14. The stables and sheds for the cows shall be thoroughly lighted with windows, and ventilated, and whitewashed during the first two months of the contract.

15. The pails and strainers used in the dairy shall be kept thoroughly clean, and scalded in boiling water and dried morning and night.

16. The inside of all cans in which milk is brought to the factory shall be cleaned and steamed at the factory by the Company, free of charge, the owners of the cans seeing that they are kept clean on the outside.

17. In case of any serious interruption to the trade or manufacture, notice shall be given to the patrons of the factory, who will then be released from their obligations to deliver milk until more normal conditions are restored.

The contract also specifies the daily average to be delivered during each month, and the prices for each month, which range as follows: April, \$1.15 per 100 lbs.; May, 95c.; June, 85c.; July, 95c.; August, \$1.00; September, \$1.10; The prices given during the remaining part of last year were as follows: October, \$1.15; November, \$1.25; December, \$1.35; January, \$1.35; February, \$1.25; March, \$1.20. The patrons deliver the whole milk, and receive no by-products, like skim milk or whey, in return.

The whole system adopted by the Ingersoll Condensing Factory, in short, has proved to be eminently satisfactory. In the words of one of its patrons: "I really think that if all the cheese and butter factories would adopt the same rules in regard to taking care of milk and delivering it at the factory, the production would certainly be better, and the patrons would get better returns. . . . We get our checks on the 15th of every month, and we know very nearly what the amount will be."

Milking and Milk Secretion.

Probably there is no cause which does more to lessen the secretion of milk than the failure to milk cows quite dry. Any milk left in the udder acts as a direct check to the secretion of a further supply, and very frequently becomes so positive an irritant as to set up some kind of inflammation; hence clean milking is one of the first essentials on the dairy farm. The usual practice is to milk twice in the twenty-four hours, and this system is generally perfectly satisfactory if the time is equally divided so that there is the same period between every two milkings. Here and there, where a cow's udder becomes unduly distended between milkings a slightly increased flow can be secured by more frequent milking, for it appears probable that secretion goes on more rapidly during the actual process of milking than at any other time, and there is no doubt that the distension of the udder and milk channels acts as a check upon secretion. The great point to remember is to milk at regularly recurring hours. The more irregularities that creep into the milking practice, so much the less will the secretion and supply become. The mere fact of milking an hour earlier or later than usual may make a material difference in the yield, as also does the actual method of milking. Generally speaking, rapid milking, when effected quietly and with due attention to the comfort of the cow, ensures the largest yield. Regularity and the careful avoidance of disturbing elements of every kind are the great factors of uniformly large milk secretion. Quite apart from the influences of the supply of food, temperature extremes, etc., each animal possesses to a great extent the power of withholding already secreted milk when nervous or excited in any way. The nervous condition may be, and frequently is, caused by a new or unskillful milker, by fright, by too much exercise, and by the presence of an animal in season. The withholding of milk is only a temporary matter, but if of frequent recurrence it operates very injuriously on the supply just in the same way as does the failure to milk cows quite dry. Of course, some animals are worse than others, because temperaments vary, and some will be found of such phlegmatic character as to be unaffected by disturbing influences of the kind specified. These are naturally the most valuable to the dairy farmer, who, though consistently striving after regularity and uniformity in the surroundings of his stock, cannot hope to altogether eliminate disturbing influences, as they always prove, to some extent, beyond control. Moreover, these phlegmatic cows are, other attributes being equal, the best to breed from for the production of dairy stock, since, just as the form and external characteristics of the progeny are generally determined by those of the sire, so the temperament and internal characteristics of the young generally follow those of the dam.—[British Ex.

Likes Knife and Paper.

Mr. Stanley Gile, Leeds Co., Ont.: "Received the knife O. K., and am well pleased with it. Success to your valuable paper, and thanking you for premium, I am, etc."

A Cow's Udder.

The construction of the udder of a cow and its relation to the formation of milk have been subjects of study for an indefinite period; also what, if any, connection there is between the size and contour of the arteries and the quality of lacteal fluid which a cow will produce. Of the latter there seems to be some relation, large arterial development not only going with a better milk flow, but, as a rule, large arteries seeming to have a coincidence at least with rich milk. Of course, there is a warrant for this, as the milk flow is dependent upon a large flow of blood. The subject of milk secretion was brought up some years ago by the German scientist Roehlg, who asserted that he had been able to trace the nerves from the spinal cord to the udder, where they divide, and permeate every part, dividing and subdividing, and touching every vesicle, the milk cisterns, etc., and yet another set into the structure of the teats. In the process of milking, these nerves are acted upon, stimulated to induce milk secretion, and in case of pain to suspend it entirely. It is now asserted that milk is not simply changed blood, but an original secretion, the same in principle as the action of the salivary glands, and as the materials—solids—are creations instead of recompositions, it is as difficult to change the character of the milk as to change the secretions of the glands named. The cow, to do her best, must be as far as possible protected from bodily harm, and her highly-wrought, nervous temperament not allowed to get out of tune; or, on the other hand, stimulated too much. The cow requires care, comfort, and quietness, and when these are given, her nerve power will have full ability to produce the best possible result in the case of each individual animal.—[Dairyman.

The Dairy Contest at St. Louis.

Half of the 120-day World's Fair dairy test (in which Jersey, Brown Swiss, Holstein and Shorthorn herds contest) shows in brief the following results: In the 60 days the 15 Holsteins gave 49,282 lbs. milk, 1,683.3 lbs. butter-fat; five Brown Swiss, 14,160 lbs. milk, 485.9 lbs. butter-fat; 25 Jerseys, 65,876 lbs. milk, 2,920 lbs. fat; 20 Shorthorns, 61,107 lbs. milk, 2,112 lbs. fat.

The largest amount of butter given by any one cow for the 60 days was 170 lbs., an average of over 2.8 lbs. each day. This total is greater than the production of the average dairy cow for a year. Over 50 of the 74 cows in the test gave over 2 lbs. of butter per day.

Results of the seventh 10-day period of the demonstration, Aug. 15 to 24:

| Breed | Cows | Av. yield cow per day | | | | Av. tests | |
|-------------|------|-----------------------|-------|-------------|-----------------|--------------|----------------|
| | | in t at | Milk. | Butter-fat. | Solids not fat. | Per ct. fat. | Sol's not fat. |
| B. Swiss | 5 | 45.4 | 1.766 | 4.064 | 3.89 | 8.95 | |
| H. Friesian | 15 | 51.7 | 1.840 | 4.207 | 3.56 | 8.14 | |
| Jersey | 25 | 41.7 | 1.985 | 3.754 | 4.75 | 9.90 | |
| S. Horn | 29 | 36.5 | 1.832 | 3.160 | 3.65 | 8.66 | |

POULTRY.

Preservative for Eggs.

Through the medium of your valuable paper will you kindly give me an answer to the following question: A recipe for preserving eggs, that is both satisfactory and economical, with a liquid and also with a dry preservative?

Ans.—I do not think you will find anything better or more satisfactory for pickling eggs for family use than water-glass, used in the proportion of one part, by measure, of water-glass or sodium silicate to eight parts of water that has been previously boiled.

Water-glass is variable in strength, and it may be necessary for you to dilute the liquid more than the amounts given above. In any case, if the water-glass is diluted sufficiently to allow a fresh egg to sink, you would then have about the right amount. This pickle is not suitable for handling eggs in large quantities, as after the eggs have been in some time there is a gelatinous coating comes over the eggs, which is easily washed off when the eggs are taken from the pickle, but would render such a large amount of labor in a wholesale way as to make it too expensive for extensive use.

A saturated solution of lime water has also given very good satisfaction. This can be made by simply slacking a couple of pounds of fresh-burnt lime with water, and then stirring the milk of lime so formed into about five gallons of water. This should be stirred occasionally for two or three hours, after which the clear liquid or lime water may be poured over the eggs which have been previously packed in a crock or other water-tight vessel. This pickle should be covered with sweet oil, otherwise it will not give good satisfaction.

We have had this pickle fail once or twice with careless parties; if well looked after it will give good satisfaction.

I would not recommend the method of keeping eggs by packing them in bran, salt, or other dry material. The eggs keep fairly well, but not first-class.

O. A. C., Guelph.

W. R. GRAHAM.

Why the Poultry Business Does Not Develop.

In his annual report for 1903, A. G. Gilbert, C. E. F., Ottawa, answers the question thus: "Experimental work for many years has plainly shown that the obtaining of eggs in winter and a better class of poultry is not so easy as at first glance may seem. Success is dependent upon conditions which are not only more or less exacting according to location, but complete knowledge of which is imperative to success. This is not always realized. The numerous letters received by the writer from different points, show that many are anxious to get results before they know how to do so. And for that reason many try only to fail. On the part of the specialist expert knowledge is requisite. On the part of all, not only knowledge, but patience, perseverance, liking for the occupation and adaptability are necessary factors. Without them success is not likely to be attained.

"A drawback to successful poultry development is often met with in the enthusiast who establishes a plant, buys a number of birds and then writes for information as to proper methods of management and feeding, which should have been first thoroughly learned. A letter received some time ago may be quoted as a case in point. It is as follows: 'Dear Sir,—I recently had opportunity to purchase at a bargain one hundred Barred Plymouth Rock pullets, and I did so. Will you please tell me how to successfully manage them.—J. M.'

"It is hardly necessary to say that in such a case successful results are not likely to follow, and then poultry-keeping is at once declared non-profitable.

"Another drawback is the practice—frequently on the part of farmers—of keeping more fowls and the hatching of more chickens than can profitably be managed or reared. In report of last year, methods of procedure calculated to lead to successful poultry-keeping by farmers were given at length. It may be admissible to repeat in this connection a suggestion made in that report to the effect that farmers should keep no more fowls than they can manage profitably, nor should they attempt to rear a greater number of chickens than circumstances will permit of their bringing to salable age as early in the season as is possible.

"Another too common practice on the farms of the country, and which retards poultry development—from winter eggs and better quality of flesh standpoints—is the keeping of 'scrub' stock. Doubtless the practice is not so general as it was, but it should be abandoned. It has been shown in previous reports that 'scrub' poultry are neither as good winter layers as pure-bred birds, nor do their chickens make as valuable table fowls. Why have them? It is to be remembered that the cost of feeding a pure-bred fowl is no more than that of the nondescript of much less value."

GARDEN AND ORCHARD.

Fruit Market in England.

Mr. J. B. Jackson, Canadian Commercial Agent at Leeds and Hull, reports:

PLUMS.

Apparently there will be quite a small crop of plums in England, and I see no reason why good Canadian plums should not be shipped here. Especially would this apply to the larger and finer varieties of Canadian plums. They should be sent here in boxes and well packed. Possibly it might be necessary to pack each plum rolled in tissue paper, but even with this extra trouble the shipping of this fruit should be extremely remunerative. The above remarks will also apply to pears, which are always in great demand in this district, and bring very handsome prices. Last year there were over 60,000 tons of raw plums and pears imported into England. Of these, the larger quantities of pears were sent from France, Belgium and the United States, and of plums from France, Germany and Holland. The United States sent about 6,000 tons of plums and pears, while Canada only shipped less than 200 tons.

APPLES.

The apple crop of England will be much lighter than expected. I am quite sure from all that I can learn that it will be much below an average crop, and a large proportion of English apples will be made into cider. Many inquiries from dealers in my district are received; dealers in the interior towns desiring to handle from 200 to 400 barrels per week. If any of the apple shippers desire to place their apples in this way, they had better correspond with this office at once. The exporter should not wait until he is ready to ship, and then find fault with the commercial agents because they might not be able to get the information to him in time. Definite arrangements should be made during August and September at the latest.

CIDER.

The demand for Canadian cider is increasing every day. I have had many inquiries during the last month or six weeks for Canadian cider, and when referred to the Canadian manufacturers, the invariable answer was that they were sold out, and that no cider could be shipped until late in the autumn. This seems unfortunate, especially when one takes into account the thousands of bushels of good cider apples which were allowed to go to waste in Canada last fall. I cannot too strongly impress on the Canadian exporter the

vast possibilities in this market for this product. Last year the United States exported into Great Britain about 250,000 gallons of cider. The price for Canadian cider here at present is: Wholesale, from 40 to 42 cents per gallon, in 40-gallon casks, and from 62 to 65 cents per gallon retail.

Some of the Canadian exporters of cider have written me and said that they feared last year was a special year, and that there would not be the same demand for Canadian cider this year. I think they are wrong. Canadian cider is only becoming known and appreciated here, and I feel sure that there will be an increasing demand for Canadian cider, which will take the place of the cider from the United States and displace it in the British markets, just in the same way that the Canadian cheese outclassed and displaced the American cheese.

Send nothing but the best, and an increasing demand and remunerative market will be the result.

Canada's Fruit Exhibit.

An exchange says: "Canada quite holds her own among the states and countries of America in her fruit display at the World's Fair. Even with California included, when real domestic value is considered, there is no exhibit in the horticultural pavilion that compares with that of Canada.

"In her display of apples alone, Canada is showing ninety-four varieties in their natural state, just taken from cold storage. In addition to this fully fifty choice varieties are displayed in bottles preserved in liquid compounds. The average visitor expresses his surprise even at this apple display, but when he is confronted with from forty to fifty varieties of choice pears; an equal number of varieties of plums; seventy different kinds of grapes; cherries in endless variety; and, to cap all, a long list of the choicest peaches, he lifts his brows in astonishment and asks, 'Does all this fruit grow in Canada?'

"In the smaller fruits Canada is equally well to the front. Her exhibit in this comprises eighty jars of strawberries; sixty of red, white and black raspberries; an equal number of red, white and black currants; thirty of gooseberries; one dozen of cranberries; twenty-five of crab apples, and a great variety of wild fruits.

"Intermixed with all this fruit are jars of preserved rhubarb, twenty varieties of tomatoes, golden-wax beans, green peas, green and white cucumbers, and almost everything that enters into household consumption in the way of fruit and vegetables.

"Conspicuous among the apples in their natural state may be mentioned the famous Northern Spy, the Fameuse or snow apple of the St. Lawrence river districts, the beautiful McIntosh Red, the Baxter or La Rue, all natives of what the Americans are pleased to call French Canada. Another attractive feature of the apple display is the very pretty yellow Transparent and the Duchess of Oldenburg, two early varieties of Russian origin, and a later native of Canada, called the Longevity, from its long-keeping qualities. Among the smaller fruits the monster gooseberries are receiving their full share of attention.

The Maritime Apple Crop.

A Halifax man who is closely in touch with the apple-producing and shipping interests of Nova Scotia, says that after careful enquiry, and after driving through the great orchard districts of the Province, he has concluded that the apple crop this year will be fully as large as that of last, which was a phenomenal one. He says, however, that while the quantity of apples will be fully equal to that of 1903, the quality this year will be much inferior as to appearance at least. The fruit is spotted, and lacks the beautiful purity of color that marked last year's crop. This and the fact that other apple-growing regions have large crops this year will, he believes, take a dollar off the price that will be realized in England as compared with the figures of a year ago. A Wolfville correspondent writes that a recent gale caused considerable damage to orchards, many branches being broken off, numerous trees uprooted, and fruit strewn on the ground. Certain kinds of apples such as Fallwaters, Ben Davis, Kings and Baldwins suffered most, but it is estimated by specialists like W. H. Chase, J. W. Bigelow and C. R. H. Starr, that the average destruction will not be over five per cent. of the whole crop. Many of these drops are going forward to the city, and Halifax should have cheap apples.—[Halifax Herald.

Choice Fruit Pays.

Fruit-growers whose sales are largely local cite instances where very niggardly buyers have been transformed into lavish buyers by persistent offerings of the choicest fruit. Take it home to yourself and ponder on it as a suggestion for increasing your own profits, remembering always how much greater your own craving is for luscious, well-ripened specimens of the best varieties than for tasteless, carelessly-selected and shiftlessly-grown fruit that actually offends the taste. The habit of eating fruit will certainly develop in a family or community if the grower, dealer or market persistently and regularly offers the kinds that "tastes like more."—[Exchange.

APIARY.

Look After the Queens.

By Morley Pettit.

There is nothing about a hive so important as the queen. She is the "heart" of the colony. From her comes the "life blood," as it were, the young bees to take the place of those which are wearing out and dying. With a good, vigorous queen the brood chamber is kept full of brood in all stages, from the eggs to the young bees emerging from the combs. A populous, energetic colony is assured, ready for any honey flow that may come. A poor queen allows the circle of brood to become smaller and smaller, and the bees get "lazy"—according to the old idea. That is, they dwindle in numbers, lose ambition, and store but little honey. The sooner such a queen is replaced the better. But the thing most to be dreaded is queenlessness. The bees are working and growing old, while none are hatching to take their places. The combs of the brood-chamber, which should be bright and filled with eggs and brood, take on a forsaken appearance, and soon become choked with pollen and honey. I am convinced that if it can possibly be avoided a hive should not be one week without a laying queen at any time. With the present scientific methods of queen-rearing, and the low price at which they can be obtained, one should have always a few extra queens of his own rearing, or coming by mail, to use in emergencies. The worst feature of queenlessness is the fact that colonies long queenless almost refuse to accept a queen, and sometimes will not even start cells. Then laying workers start, and the case is almost hopeless. Let me again urge that the queen condition of every colony be looked after carefully before preparing for winter. Any colony without a queen now may as well be united with one having a good queen, as they cannot winter satisfactorily in that condition. Again in the spring some queenless colonies will be found. In such case, it is best to have queens from the Southern States, where they can be early reared, sent the latter part of April, and introduced with tobacco smoke

EVENTS OF THE WORLD.

By the capsizing of a ferry boat at Lodz, Poland, recently, seventy people were drowned.

A vessel with 180 Paraguayan rebels on board was attacked and sunk by two Government ships recently.

Three hundred families have been made homeless by forest fires at Little Bay, Nfld., which hamlet has been destroyed.

Seven people were killed and nineteen injured on September 3rd by the collision of a Wabash World's Fair train with a suburban electric car at St. Louis.

It is stated that guns built after the model of a machine-gun invented by Lord Dundonald for use in South Africa are to be used by the Russian forces in the near future.

Russia has equipped two steamers, the Korea and the Kitzl, belonging to the Danish-Russian East Asiatic Steamship Company, as auxiliary cruisers. The vessels will be attached to the Baltic squadron.

A despatch from Simla, dated August 30th, states that it is understood that the Thibetans have at last yielded to the British terms, and that, consequently, the British force will leave Lhasa much earlier than was expected.

Another forest fire, seven miles long, is burning at Point Grey, close to Vancouver, B.C. Fires are still raging all over the Province, and the sun has been obscured by smoke for two weeks. The loss of timber, it is estimated, will amount to over \$6,000,000.

By an Imperial Decree recently issued by the Czar, the Finnish Diet is to be convoked on December 6th, and provision is made for its subsequent convention at intervals not exceeding five years. The decree is giving much satisfaction to the Finns, who objected strongly to the Russifying policy of Plehve, and who look upon this new action of the Czar as a guarantee that some degree of self-government is to be afforded them.

On September 1st, the second section of the trans-continental express, west bound, having on board Lord Minto and the vice-regal party, crashed into a freight on a siding at Sintaluta, 300 miles west of Winnipeg. Five, all women, were killed, and four or five other passengers injured. The private car in which the Governor-General and his party were riding, was the last coach on the train, and escaped without injury to any of its inmates.

Earl Grey, who is to succeed Lord Minto as Governor-General of Canada, was born November 25th, 1851. He comes of a distinguished line, numbering

among his ancestors the illustrious statesman, Earl Grey, of historic fame. The present earl, the fourth to hold the title, was educated at Harrow, and at Trinity College, Cambridge. In 1880 he was elected to the House of Commons by the Liberal Party, as member for Northumberland, continuing to represent that county until 1886. In 1896 he went to South Africa, where he was administrator of Rhodesia during 1896-97, becoming director of the British South Africa Company in 1898. He is a brother of Lady Minto. His eldest son, Viscount Howick, who is now twenty-five years of age, is a second lieutenant in the 1st Life Guards. Earl Grey is also possessed of literary proclivities, having published in 1899, "Hubert Hervey, a Memoir." Upon the whole he is highly esteemed as a man of undoubted ability, common sense, and serenity of character, and as such he bids fair to be highly esteemed as Governor-General of Canada.

After ten days of almost continuous fighting, Field-Marshal Oyama's flag floats victorious over Liao Yang, from which, on September 1st, the Russians withdrew, after first blowing up their magazines and setting fire to the stores of provisions laid up at that point. What Kuropatkin's plans now are is a matter of some conjecture, but it is surmised that he will eventually fall back upon the strongly fortified town of Mukden, into which European reinforcements are pouring every day. For the present his forces, with the exception of General Stakeberg's corps, which was cut off by the Japanese, are concentrating at Yentai, eighteen miles south of Mukden. The situation at Port Arthur is unchanged, the Japanese still continuing to shell the forts by night and day, but it would seem that the effect of the news of Liao Yang's fall must depress the brave defenders of the town to such an extent as to shorten the time which might otherwise elapse before the downfall of Russia's "Gibraltar of the East."

NOTES AND NEWS.

Western crop reports all agree that the damage from rust throughout the West this season has been light.

The Dominion Millers' Association report that the Ontario wheat crop is this season one-third less than was expected.

A party of men has been despatched to carry on the work of the preliminary survey of the Ottawa and Georgian Bay Canal.

The members of the Black Watch band are being given an enthusiastic reception at every point during their progress through Canada.

Interested oil men of the Petrolia district, Ont., are much delighted over the opening up of a new oil well, whose output has been estimated at 125 barrels a day.

Mrs. John Mills, mother of Dr. James Mills, of the Railway Commission, formerly President of the Agricultural College, Guelph, Ont., died in Toronto on the first of September. She had reached her 87th year.

The complete returns of Canada's trade shows an increase of five and a half million dollars over the previous year. The total volume for the twelve months ending June 30th is \$472,733,038. In 1894 the volume of trade was \$240,099,889, showing an immense gain in the last nine years.—[Ottawa Free Press.

Another meteoric stone, this one weighing 28 pounds, has been unearthed in Melancthon Township, Ont. It had fallen into the middle of an oat-field with such force that it was embedded two feet in the ground. Mr. Johnston, owner of the oat-field, watched it in its descent.

Mr. Dryden, the millwright, made a discovery last week which goes to show the great length to which a tree's roots will grow. A cherry tree stands 15 or 20 feet from the mouth of his well, and the roots extend to the bottom of the well, which is 22 feet deep. For a small tree to have roots forty feet long is quite unusual.—[Galt Reporter.

The farmers of Scarborough, Ont., are becoming enthusiastic over the co-operation idea. In one section about a dozen farmers have combined to purchase an up-to-date threshing outfit, with which they will first thresh their own crops, then do outside work. If the plan works satisfactorily, a milk-distributing co-operation, by which milk will be supplied direct to the consumer through a city delivery, may be attempted.

Lightning and Wire Fences.—The necessity for running a wire into the damp earth at every five or six posts in building wire fences is evident. The young man who received an electric shock from leaning with one hand on a wire fence during the storm last week, remained partly unconscious for a few minutes. Cattle and other animals lying beside a wire fence have been killed by lightning in the same way as he was shocked. Sinking a wire into the earth is good protection from this danger.—[Fergus News Record.

According to experts in the apple trade in Nova Scotia, the apple crop in that Province this year will be large, but not good, the fruit being spotted and lacking in color. It is expected that Nova Scotian apples this season will not realize within a dollar of the price paid in England a year ago. From the fact that during recent gales Ben Davis, Kings, Baldwins and Fallwaters suffered most from uprooting, breaking

of branches, etc., it would seem that these trees are not so well adapted to exposed situations as other hardier kinds.

To the fruit-growers of Essex Co., Ont., is due the credit of leading the way in an industry which promises to become a somewhat important one in Canada as cities grow and towns multiply, viz.: the forcing of early vegetables for the market. By the method adopted by the growers, which is to start the vegetables under glass during the latter part of the winter, transplant them into plots sheltered by cotton frames, and finally into the open, it has been found that an exceedingly early crop of vegetables, much superior in quality to those imported from the United States, can be produced, and as this year the quantity produced has not nearly been equal to the demand, the growers are enthusiastic in the determination to go into the business on a larger scale next year.

First Week at the National Exhibition.

Under the most favorable auspices, the Canadian National Exhibition, Toronto, was declared open on Monday, August 29th, by His Honor the Lieutenant-Governor of Ontario. Last year the Dominion of Canada Exhibition was held in Toronto, and the management decided that this year's great fair should not suffer by comparison. Accordingly, elaborate and careful preparations were made to insure an exhibition a little better than had ever before been held in the Capital City of Ontario. Toronto Fair is the only annual agricultural and industrial exposition that extends over two weeks of time, but this is not the feature that makes it the superior of any other event of its class in the world. Its exhibits of live stock, farm produce and manufactured goods are the largest and most excellent that is annually collected under a single management.

This year, the live-stock department is particularly strong. The Clydesdale men have done themselves credit by making an exceptionally fine display. Shires are also well represented, and a string of Percherons contribute in no small manner to the interest in our equine friends. The first week, judging was well advanced in the pony, saddle, driving and fancy classes, breeding sections following the second week.

In cattle, the Shorthorns, as usual, are the most numerous, the crack herds of Sir William Van Horne, Selkirk, Man., and J. G. Robbins & Sons, Horace, Indiana, being on hand to try conclusions with their Ontario neighbors. Herefords are represented by three herds, and Ayrshires are out in their usual strong force. Holsteins and Angus are not as numerous as last year, while the Galloways have about the same number. Jerseys are making a good show, but there are no Guernseys present.

The poultry, sheep and swine exhibits are, probably as numerous as other years. Yorkshires and Tamworths are exceptionally strong, while Berks are fewer in number. The Shropshire sheep make one of the strongest displays yet seen here, while in the other breeds a goodly number are present.

Grains and vegetables are exceptionally well displayed, the judging in these classes being completed the first week. A display of more than passing merit is that from the Edmonton district, consisting of grains, grasses, legumes, vegetables, minerals and manufactured woollen goods. The exhibit is made by the Edmonton Town Council and Board of Trade, and emphasizes more than words can express the wonderful resources of the Northwest.

Dairy products are fully up to any former show, the best butter coming from Quebec, and the first-prize cheese from Ontario.

The feature attraction under the grand stand is the collection of model warships sent out for exhibition by H. M. the King. These model ships are attracting almost as much attention as did the jubilee presents last year.

Cumberland County, N. S.

We have probably had less rainfall during the growing season (from the middle of May to the middle of August) than for many years.

The hay crop has been very light, probably lighter than last year, and grain will be very light, especially oats on dry land. Some late fields of grain sown on rather damp land may be a fair crop.

There are some good fields of wheat, and with the introduction of roller mills, we look for considerably more wheat to be grown in this section.

The last week has been showery, and on the 20th we had quite a heavy rain, which will help the root crops some. Turnips were pretty badly taken with cutworms and the "turnip fly," but the later-sown fields were not so badly affected, and will probably be a fair crop.

It is a poor year for clover, which is a heavy loss, as we need the clover both for fodder and fertilizer.

Fodder corn is doing well, and rape fairly well. Owing to the short hay crop a good many light, half-fattened cattle are being forced on the market at about three cents live weight, but good, thick beef is scarce and bringing \$4 to \$4.50.

Dairy butter is selling at 18 cents, and the supply is ample.

Horses are not quite so high as a month or two

ago, but good, sound young horses of 1,300 pounds up are worth \$150 to \$200 apiece.

Forest fires have done great damage in some sections of this county.

C. H. BLACK.

P. E. County Crop Notes.

The 1904 crop is nearly gathered. Hay was a good crop in the county, and although the weather was not all that could be desired, because of rain injuring a large amount of it, and at the same time hindering work, so that a great deal of it became overripe before it could be harvested, still a large amount was harvested in perfect condition. Drouth has been reported from two different sections of the county, but these places are rather small. Winter wheat has been a failure, owing to winter-killing. Winter rye is fair. Barley is not up to the average, owing to injury from wet weather. Spring wheat is a complete failure, some being struck with the rust till it is not worth cutting, and all of it is very poor. Oats are a large crop, and very good. A few late pieces are rusted slightly, but on the whole they are a fair crop. Emmer is not grown very largely yet, but what there is is good. Buckwheat promises to be a good crop—the best show for one we have had in years. Corn is very backward, owing to the cold, wet weather. However, a week or so of hot, dry weather would make it a fair crop. Potatoes appear to be a good crop, and no reports of the blight. Beans are well podded, and will probably be a good crop. Vegetables of all kinds are a fair crop. Pasture is good, owing to the frequent showers. Apples are going to be a rather small crop, especially winter varieties. However, there is as yet no demand for them. Plums are a fair crop, except the Gage plums; there are none of this variety. Strawberries and raspberries were a large crop. Cherries, none. Pears, up to the average. A fair acreage of fall grain will be sown.

W. A. S.

Canada Products in British Markets.

The broken weather of the past week, with its frequent showers, which in some districts have been rather copious, together with a fairly high temperature, has vastly improved the prospects of autumn and winter feed. Root crops of all kinds have benefited immensely, and on good root land are well covering the ground and have assumed a healthy foliage. Pastures, too, have continued to improve rapidly, so that with a good average hay crop well secured, there is every reason to hope that the store cattle trade will continue good throughout the year, and this in its turn will help very much to keep up the price of beef, thereby making things better all round.

The past week has brought much excitement in the American markets, owing to the reported serious deterioration in the condition of the spring wheat crop, concerning which some very alarming reports have been cabled to Europe. The English markets have naturally been affected by the American movements, but there has been no disposition to imitate the wild movements of Chicago and New York.

Returns of the world's shipments to Europe have shown an average weekly total during the past eight weeks of 855,000 qrs. This compares with requirements of about 1,100,000 qrs. per week, a rate which will doubtless be the minimum for the coming season. We are now approaching the season of large shipments. Last year, for instance, the weekly rate of shipments for September, October and November was 1,255,000 qrs., and in the previous season it was 1,300,000 qrs. This season there are no signs of even the round million quarters per week being reached, so that there is plenty of excuse for feeling confident in the maintenance of a higher level of price than last season.

On the Baltic yesterday there was little or no demand for cargoes afloat or for shipment, and the prices in many cases continue to sag. Californian or Walla Walla were not offered.

At Mark Lane yesterday the attendance was about the average, and English wheat was nominally unchanged. Foreign sorts were slow of sale, at 6c. to 12c. under last Monday's quotations. No. 1 northern Manitoba, ex-ship, \$9.20; No. 2 northern Manitoba, landed, \$9.10; No. 3 northern Manitoba, ex-ship, \$8.60. Trading in maize was rather inactive, but values have a hardening tendency. American flour of all grades was firmly held, while English and Hungarian ruled steady at late quotations. Grinding sorts of barley were scarce and harder to buy, but malting descriptions are in poor request. Oats firm, at \$3.80 for South Russian.

The cattle trade at Deptford has been of a firmer nature, both in regard to tone and value. On Wednesday the prices obtained were the best for quite two weeks, the best States cattle making from 12½c. to 13½c., while those from the Dominion (200) were sold at 12c. to 12½c. per pound. One hundred and fifty-two Canadian sheep, on last Saturday's market were disposed of at 13c. per pound.

At Deptford trade was rather slower, and prices hardly so high as on Wednesday. The Yankee beasts sold at 12½c. to 13c., with some exceptional lots at 13½c., and the Canadians at 12c. to 12½c.

The sheep trade was very firm, and the 614 Canadian sheep offered sold readily at 13c.

Chilled beef is coming forward in increased quantities, but it is difficult to find quarters of first-class quality, and in many instances the value of the meat has been spoilt by the dressing, which is evidently the

work of novices. Values show a material decline at 10c. to 11c. for hinds, and 7c. to 8c. for fores.

The butter trade has been only moderate this week, the high prices ruling having checked the demand. The Canadian description is firmly held, good to fine making 17c. to 19c., finest up to 20c., and some very choice lots as much as 21c. per pound.

Canadian cheese trade has ruled firm, with trade more active, but the close is again quiet. Primest white and colored cheese has realized 9c. to 9c. and Brockvilles and Bellevilles of August and September make for September and October shipment have been offering at 9c. to 9c. c. f. and i.

The demand for hams is now very quiet, and quotations rule somewhat irregularly. Canadian long-cut (green), 11c. to 13c.; short-cut, 11c. to 11c. per pound.

Bacon.—The demand during the past week has ruled on a quieter basis, the inquiry being for the most part confined to the best selections, which have maintained previous rates. Secondary descriptions, however, have a dragging sale, and are generally lower on the week. Canadian ordinary brands are quiet, at 10c. to 11c., but there is a fair demand for the leanest of the leading brand, at 12c. per pound.

London, Eng., August 27th.

Next Week at the Western.

A PHENOMENAL SHOW PROMISED.

Next week the gates at the big Western Fair grounds, London, will be thrown open, and from all appearances and the magnificent preparations being made, the people of Western Ontario will have the largest exhibition in the history of the Forest City. The entries in all classes of agricultural, horticultural, live stock and miscellaneous exhibits are unusually large, and the special attractions and fireworks before the grand stand are more elaborate than ever before.

MARKETS.

LIVE STOCK.

Quotations for Live Stock at Toronto:

Export Cattle—Little doing in this line. Extra choice are quoted at \$4.90 to \$5.05; good to common at \$4.70 to \$4.80; and cows at \$3.75 to \$4.

Butchers—Good to choice, \$4.25 to \$4.60; fair to good, \$3.80 to \$4; mixed lots, medium at \$3 to \$3.40, and cows at \$2 to \$3.25.

Feeders—Quotations about steady, at \$2 to \$4.50 per cwt.

Stockers—\$3.60 to \$4 for heavies, and \$2 to \$3 for lights. Light bulls, \$1.75 to \$2.75.

Milch Cows—\$25 to \$60 each. Little doing in this line.

Calves—\$2 to \$10 each.

Hogs—A decline reported to \$5.37 1/2.

GRAIN AND PRODUCE.

Toronto Wholesale Prices.

Wheat—Is rather firmer, with sales of old No. 2 red and white at \$1.05, west and east. New No. 2 red and white are quoted at \$1.02 to \$1.03, west and east. Goose is steady at 90c. for No. 2, east. Spring is steady at 96c. for No. 2, east. Manitoba wheat is steady at \$1.08 for No. 1 northern, \$1.05 for No. 2 northern, and \$1.02 for No. 3 northern, at Georgian Bay ports, and 6c. more grinding in transit.

Mill Feed—Is steady, at \$17.50 to \$18 for cars of shorts, and \$13.50 to \$14 for bran, in bulk, west or east. Manitoba mill feed is steady at \$19 to \$20 for cars of shorts, and \$17 to \$18 for bran, sacks included, Toronto freights.

Barley—Is steady. No. 2 is quoted at 41c., 42c. for No. 3 extra, and 40c. for No. 3, west or east.

Rye—Is steady, at 58c. to 59c. for No. 2, west or east.

Corn—The market is steady. Canada is nominal at 53c. for cars, west. American is steady at 62c. for No. 2 yellow, 61c. for No. 3 yellow, and 60c. for No. 3 mixed, in car lots, on the track, Toronto.

Oats—Are steady. New mixed are quoted at 31c., and white at 32c., west or east. Old are steady at 34c. for No. 1 white and 33c. for No. 2 white, east, and No. 2 white are quoted at 32c. to 33c., west.

Peas—Are steady at 63c. to 64c. for No. 2, west or east.

Potatoes—Are firm in tone. Quotations for out-of-store stock here are unchanged, at 70c. to 75c. per bushel.

Poultry—The inquiry is good, but not enough is coming forward. Quotations are steady at 16c. for spring chickens, and 11c. to 12c. for old birds.

Baled Hay—The demand is not very active, and there is plenty of hay offering. Car lots on track here are quoted unchanged at \$7.50 to \$8 per ton.

Baled Straw—Is quoted unchanged at \$5.50 to \$5.75 for car lots, on track here.

Butter—Market about steady. Receipts continue large, but the poor stock predominates. Quotations are unchanged all round.

Creamery, prints 19c. to 20c.

Creamery, solids 18c. to 19c.

Dairy, tubs, good to choice 13c. to 14c.

Dairy, inferior grades 9c. to 11c.

Dairy, pound rolls, good to choice 13c. to 16c.

Dairy, inferior 10c. to 12c.

Cheese—The outside markets are firm, and the feeling here is stronger, in sympathy. Prices are as yet unchanged, at 9c. for large and 9c. for twins.

Eggs—The demand is active, and not more than sufficient eggs are coming forward to meet it. The market is firm in tone, and quotations are unchanged at 18c.

Wools—Receipts are still light, and quotations are unchanged at 20c. to 21c. for washed, 15c. for rejections, and 12c. to 13c. for unwashed.

FRUIT.

Receipts heavy, and trade active.

Lawton berries \$0 06 1/2 to \$0 08

Peaches, white flesh, basket 40 to 60

Peaches, yellow 60 to 1 25

Apples, basket 15 to 20

Pears 25 to 45

Plums 35 to 65

Grapes, Champions 20 to 25

Vegetables—

Tomatoes 15 to 25

Cucumbers, basket 10 to 15

Beans, basket 20 to 30

Montreal Markets.

Oats—Very few new oats received so far, but No. 2 stock is being quoted at 37c. afloat. Dealers are a little doubtful of the new oats, and the opinion seems to be that a decline may take place shortly.

Peas—About steady, at 73c. afloat.

Barley—No. 2, 50c.; No. 3 extra, 50c.; No. 3, 49c.

Feed—Stocks are light and the market firm. Manitoba bran, in bags, \$17 to \$18; shorts, \$19 to \$20 per ton; Ontario bran, in bulk, \$15.50 to \$16.50; shorts, \$19 to \$20; moultrie, \$26 to \$28 per ton, as to quality.

Hay—No. 1, \$9 to \$9.50 per ton on track; No. 2, \$8; export hay, clover and clover mixed, \$6.50 to \$7. Cheese—8c. to 8c. for finest Quebecs, 8c. to 9c. for townships, and 9c. to 9c. for Ontarios.

Butter—Demand anything but active. Holders of finest townships are still demanding 18c. to 19c., and 18c. to 18c. is being asked for Quebecs. Factory men were offering to sell at 18c. to 18c. at the cold stores to-day. Fine creamery can be had at 18c. to 18c., and mediums at 17c. to 18c. Ontarios are 18c., and dairies being quoted at 14c.

Eggs—Dealers are still able to secure straight-gathered stock at 16c. to 16c. at country points, but some appear to be paying rather more, and one section near by demanded as high as 17c.

Potatoes—Dealers are paying 70c. to 75c., mostly the latter, for good stock laid down here, in bags of 90 pounds, and selling them from store at an advance of 10c. or so per bag.

Honey—Light strained is offered at 7c.

Retail Prices, Toronto Street Market.

Table with 2 columns: Item and Price. Items include Wheat (white, red, new white, new red, spring), Peas, Oats, Barley, Rye, Hay, Straw, Dressed hogs, Butter, Eggs, Old chickens, Spring chickens, Turkeys, Spring ducks, Potatoes, Beans.

Horse Market.

As usual during exhibition there was some falling off in the consignments, as prices rarely ever keep up during exhibition excitement. The offers, however, during the week at the Repository, Toronto, were of fairly good quality, and upwards of 100 head were disposed of. The principal purchasers on Tuesday were two French horse-dealers from Three Rivers, P.Q., who secured an excellent lot of 28 head, consisting of roadsters, general-purpose horses, and a couple of fast trotters. The other dealers were mostly local. The following is Walter Harland Smith's weekly report of prevailing prices for sound horses, five to seven years: Single roadsters, 15 to 16 hands, \$125 to \$200; Single cobs and carriage horses, 15 to 16.1 hands, 130 to 250; Matched pairs and carriage horses, 15 to 16.1 hands, 300 to 550; Delivery horses, 1,100 to 1,200 pounds, 125 to 165; General-purpose and express horses, 1,200 to 1,350 pounds, 135 to 185; Draft horses, 1,350 to 1,750 pounds, 150 to 275; Serviceable second-hand workers, 50 to 100; Serviceable second-hand drivers, 60 to 110.

Buffalo Markets.

East Buffalo.—Cattle—Good cattle, steady; common, very dull; prime steers, \$5.40 to \$5.90; shipping, \$4.65. Hogs—Active; heavy, \$5.90 to \$6; mixed, \$5.95 to \$6; Yorkers, \$5.90 to \$6; pigs, \$5.75 to \$5.85. Sheep and Lambs—Steady; lambs, \$4.50 to \$6.65; a few at \$6.75; yearlings, \$4.50 to \$4.75; wethers, \$4.25 to \$4.50; ewes, \$3.75; sheep, mixed, \$2 to \$4.

British Cattle Market.

London.—Cattle are steady, at 10c. to 12c. per pound; refrigerator beef, 9c. per pound. Sheep, 10c. to 12c., dressed weight.

Montreal Markets.

Montreal.—The highest price paid for cattle was 4c. per pound. Calves sell at \$2.50 to \$7. Sheep sell at 3c. to 3c. per pound; lambs at \$2.50 to \$4 each, or 4c. to 4c. per pound. Fat hogs sell at 5c. to 5c. per pound.

Cheese and Butter.

At all the leading dairy markets in Ontario and Quebec during the past week cheese and butter were freely offered, the former selling for 8c. to 9c., and the latter for 18c. to 19c. per pound.

London, Ont., Hog Market.

Prices for live hogs, for Thursday morning, Sept 8th, delivered at the packing house in Pottersburg: \$5.50 for 160 to 200 lb. hogs, unfed; \$5.25 for hogs over 200 lbs., unfed; \$5.00 for lighter hogs.

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"Forbear to call him blest
That only boasts a large estate;
Were I so tall to reach the pole,
Or grasp the ocean with my span,
I must be measured by my soul:—
The mind's the standard of the man."
—Watts.

The Wedding Day.

"In sickness and in health
Till death us do part."

Such a bare little place! cold, and dark and comfortless as a room well nigh innocent of furniture must be, yet sweet and clean and orderly, and, above all, home to old sick Molly and Timothy her husband.

"Bring her over at once, then, and the sooner the better; perhaps this will make the journey easier," said the doctor, as he laid a shilling on the table, and breathed a sigh of relief.

He had come ready prepared to meet the hundred and one difficulties and objections usually put forward in such a case, but the convincing arguments had been all unneeded, for Molly had risen to the occasion bravely, and had consented to become an in-patient at the big hospital across the park that very day. So, his task successfully accomplished, the doctor turned to leave the room.

"Might it be to-night?" It was Timothy who spoke. "I'll bring her for certain to-night, but we'd like to have just this one day together, first."

Now, the doctor was quick-tempered, and feeling impatient at any suggestion of delay, he answered rather sharply:

"No, no, bring her at once as I told you; why, the sooner she is in, the sooner she will be out again, you know; what objections can you have?"

Timothy hesitated, but a glance at Molly's thin face and a certain eager wishfulness upon it gave him courage.

"It's only this, sir, and it may seem a poor sort of reason to you, but this is our wedding-day, we've never spent it apart yet—and—" the old voice faltered, and the sentence was never finished, for the young man himself interrupted it:—

"Reason! why it's the very best of reasons, if you had only said so at once! Bring her to-night, then, by all means; good-bye till then."

And as he went on his way amid the busy London streets, the doctor thought of a time, not perhaps so very far off now, when with love and friends, and plenty all around, he too should keep his wedding-day. And it may be, that as he thought, the joy in his own heart was none the less intense and sacred because there came mingling with it a remembrance of some of the chastening possibilities of life, and a feeling of kindly sympathy with some other travellers on its road, for whom the end of the journey together could not be far distant now.

Left alone with his wife, Timothy seated himself beside her, and patted her hand encouragingly.

"Hospitals are such fine places, Moll." "Very fine, dear," and she looked at him with the smile whose sunshine had made life bright to him for so long.

"Such splendid food and nursing, Moll, and the rooms! why, I'm only afraid you'll be looking down on this poor little place when you come back to it after a bit so well and strong; for its wonderful how well folks do get in those hospitals, Moll, quite wonderful."

"Yes, Timothy, so they do, very often."

Her lips trembled, but only for a moment. Then, with a brave attempt at cheerfulness, she continued:

"But Tim, my man, it's getting on,

and we're wasting such precious time, shan't we begin?"

And drawing nearer still, Timothy began. It was an old, old custom with them now. Year after year as the day came round they had kept it together in the same simple fashion, though never before in such a room, or with so little to help the keeping. Formerly the little anniversary festival had been as a sort of happy duet between them, each in turn reviving some sweet old memory or cherished recollection, the precious gleanings of a long married life, too dear and sacred for the common handling of every-day use, and only lovingly and tenderly brought out on such a day as this to be dwelt on, ay, perhaps wept over, too, but with those blessed and healing tears from which all pain and bitterness have long since passed away.

To-day, however, Timothy had it all his own way, for Molly said little, only lay back and smiled contentedly, or shook her head gently as the case demanded, while she listened once more to the old familiar story that time only seemed to make more dear.

And Timothy told of the happy courting days, happy though wise folks had shaken their heads and had augured ill of this foolish marriage; of a certain April morning when a dull old London church had seemed so still and solemn, and yet so strangely bright; of the friends—and he named them one by one—who had collected at her home near by to wish them well; and at last of that real home-coming, the settling down in the poor little attic rooms which his love and thought had made so sweet and snug and cosy.

"And the violets," she put in quickly, "don't forget the violets, Tim."

"Aye, the violets, I pinned them on myself, didn't I? The sweetest breast knot I could find for the sweetest lass in all the world to me."

He paused again and she watched him keenly, anxiously.

"Yes, Moll," he resumed presently, "don't let us shirk it, old girl; then—" but his voice sounded strange, and she could barely catch the words, "then came that grand first dinner-party of ours; you and me for guests, and fish-fried fish it was, with potatoes, fried potatoes—and I don't know what besides, and you laughed so because I couldn't help to cook them, do you remember, Moll? Do you remember?"

and throwing back his head, Timothy burst suddenly into a laugh so strange and wild that it well-nigh tore poor Molly's heart in two. Then, as suddenly ceasing, he buried his face in his hands and sobbed as though his heart must break, while the quiet tears ran down his old cheeks too, and what could she say to comfort him?

For nine-and-thirty years that little anniversary feast had been celebrated so worthily, every item of that happy first meal together repeated, and now!

"Oh, my Moll, my Moll," he sobbed, "you must go without it to-day. I've no money left, not even a penny; poor girl, my poor old girl."

She dared not trust herself to speak, only stroked the grey head softly, tenderly.

Suddenly he raised it, and looking not at her but at the doctor's shilling, he pointed eagerly to it.

"Moll!"

But she shook her head sadly.

"It was for the cab, Tim. There is neither train nor bus to help me, and I must go in, you know."

He sat still once more lost in thought. Then jumping up excitedly he stood before her, and spoke fast and eagerly.

"Moll! think! You know the park, quite near? Could you with my arm, my strong arm, dear, could you walk to its gates? You could? Then listen, Moll: 'I'll carry you through, it's not far, and then, why then, it's but a step on the other side to the hospital door, do you see, old woman, do you see?'"

Moll nodded, but looked confused. The nod, however, apparently satisfied him, for he offered no further explanation, only asked if she minded being left by herself for a bit, and then, smiling mysteriously, disappeared.

Left alone, Molly lay still, too tired and weak to wonder much at anything while her mind wandered dreamily back again over the pages, of that old life story whose joys and sorrows seemed to-day to have become so strangely merged in one; till at last she remembered no more, the tired eyes closed wearily, and calmly and peacefully old Molly slept.

Timothy's re-entrance awakened her and she smiled a welcome.

He came forward eagerly, his old face flushed and glad, his little body bent half double over the covered tray his shaking arms were carrying so proudly; a tray from which there issued forth the all-pervading smell, appetizing or sickening as the case may be, of—fried fish!

"Shut your eyes tight, old girl, just for a few moments," he cried out; and still beaming from ear to ear, Timothy brought forward the little round table, placed it near Molly's chair, and softly and quickly proceeded to lay it. Fish! potatoes! bread! butter! tea! milk! Why, what more could king or queen desire? And all from the marvellous possibilities of one bright shilling!

Then, diving into the mysterious depths of a back pocket, Timothy produced therefrom a little bunch of violets, crushed indeed and faded, but sweet still, and bending softly over Moll he gently fastened them on her breast. Then seating himself opposite to her he told her eagerly she might "look."

Her unaffected surprise was rich reward indeed.

"It's your cab, dear heart," he cried. "Your cab! you couldn't use it and a riding-horse too, could you? and here's your horse all saddled and ready. It's quite right and square, Moll, he added quickly, as he caught sight of an expression of doubt on her honest face. "Didn't the doctor say it was to make the journey easier? and won't it, old girl, won't it? Ah, I thought that would settle it."

Whatever she may have felt, Molly had not the heart to object any further, and so the wedding-feast proceeded.

Timothy picked out the daintiest and most tempting morsels he could find, and for his sake she did her best bravely, but it was hard work. Everything tasted so strangely to-day; even the blessed cup of tea seemed to have lost the magic of its strengthening and reviving powers, and at length all further effort impossible, she waved off the last proffered morsel and lying back wearily, shook her head.

"Eat it yourself, you don't cheat fair, my man; and, ah Tim," she added sadly, "you've forgotten after all, for that day you drank our health in a glass of beer."

Timothy had expected this and was not to be taken at unawares.

"Beer!" he answered unblushingly, "ah, yes, to be sure, so I did; and I was just thinking as I came along how tastes change. Why, there's something almost unpleasant to me in the very idea now! So to-day if you please, my lass, I'll just drink your health in tea."

Molly said nothing. Only, for a few

minutes the room seemed dim and misty, and life was very sweet.

And so, once more that wedding feast was kept.

A little later, just as the short spring day was drawing to its close, the few pedestrians hurriedly wending their homeward way across that quiet bit of the Park, paused for a moment to gaze at a somewhat unusual sight. It was that of a little old man, weak and tottering himself, but pushing bravely and steadily on with eyes firmly fixed on the still far distant gates, and carrying on his back, her thin arms clasped about his neck, her hands firmly grasped in his, an old sick woman, Molly, his wife.

Hearts are kind, and more than one friendly offer of help had been given to Timothy, but though grateful for the offers he had seemed almost impatient at the delay and declining all assistance, had plodded quietly on again.

He could hardly have told how often he had stopped to rest since first that strange journey had been begun; certainly each time that the shelter of a friendly seat had been gained, often of necessity when there had been no such help at hand. Somehow he had fancied himself so much stronger than had proved to be the case, for it surely could not be that Molly was heavier than he had imagined, and she so weak and ill.

At first her cough had been terribly bad, and it had torn and hurt him so to hear it; but of late it had seemed to get better and at last it had ceased altogether, and very gratefully Timothy had thanked God for that. A few moments ago they had stopped to rest again for the last time and he had questioned her tenderly as to how she did. Her face looked paler he thought, but she seemed easy and happy, and she had smiled so sweetly at him as she answered rather drowsily, "quite comfortable, Timothy, only very sleepy; good-night, my man," and he had kissed her lips tenderly and reverently as he always did, and then cheered and comforted had once more pushed on.

Ah! there were the Park gates almost reached at last, and indeed it was time, for his old arms ached terribly and his old knees threatened to fail him altogether. He spoke encouragingly to her from time to time, but she had evidently fallen asleep, for she did not answer him. It was better so, he thought, for now she could not guess how tired he was, and it would have hurt and vexed her sorely had she known it; his good old loving Moll!

Only a few more weary steps and the gates were really gained. Passing through them on they went, these two strange travellers, and the little band of urchins in their wake noticed that just before the great door of the hospital came in sight the old man panted more and more, and his poor little stock of strength seemed almost exhausted.

Yes, the labor of love was all but over now; one more effort and the goal was reached. Worn and weary, and spent with fatigue, but still clasping tight that precious burden Timothy stumbled up the last steep steps, and as friendly arms drew him into the safe shelter of that fire-lit hall, and kindly faces looked pityingly into his, the place seemed suddenly to become confused and misty, the voices to recede further and further away, till at last, wrapped in a merciful unconsciousness, he remembered no more.

Faithful unto death; his task was done; that kiss in the Park had indeed sealed their last good-bye, and his loving old arms had held her to the end. For, as they gently unclasped her arms

An Occasional Paper.

ABOUT SOME PEOPLE.

The visit to Canada of a personage of such great importance as His Grace the Archbishop of Canterbury is too noteworthy to be passed over in silence, nearly every paper issuing from the press having heralded it, and having told us, some one thing, some another, of the career of the distinguished man to whom has been accorded the crowning honor of holding the very highest position in the Anglican Church. His is an office which dates back to A. D. 597, and which has been occupied through the centuries by ninety-four prelates before him, amongst them many such as St. Augustine, Cuthbert, Lanfranc, Anselm and Thomas a Becket, with whom history has made us familiar. As Primate of all England, Dr. Randall Thomas Davidson takes official precedence over every one of the King's subjects, whether Duke, Premier, or Lord High Chancellor. Amongst his prerogatives, we are told, is that of heading the Commission of Great Dignitaries, who form a species of Council of Regency in the event of some time intervening between the death of a sovereign and the assumption of the reigns of Government by his or her successor. This was a contingency which did arise, and was so met by the Primate of that day, when some days elapsed between the death of Queen Anne and the arrival of George, Elector of Hanover, to take possession of the throne of England. Not only officially, but because of Royal preference and appreciation, has Dr. Davidson become the spiritual adviser of the royal family of England. The late Queen Victoria, to whom His Grace administered the last rites of the church, and also their present majesties, have always recognized him as such, besides admitting him to a closer intimacy than has ever been enjoyed by any one of his predecessors; and to Dr. Davidson has, from time to time, been committed the duty of preparing several of the younger members of the royal family for confirmation.

AS A PREACHER.

Although, as he himself candidly acknowledged, Dr. Davidson possessed "no special preaching gifts, and, therefore, would not attempt to offer to his clergy any disquisition upon what sermons ought to be," yet to the clear judgment and keen instincts of Queen Victoria, Dr. Davidson appealed as "a preacher after her own heart." She showed, in many ways, her appreciation of his "earnest exposition of Christian truths, his simple, unargumentative style, his avoidance of controversial matter, and his sympathetic understanding of the needs of the soul," all expressed "in a mellow voice and with a dignified, unpretentious manner." With her well-known insight into character, Queen Victoria marked also Dr. Davidson's unswerving devotion to the work and duty which lay nearest to his hand. What wonder, then, that she, step by step, opened up the way to his career of almost uninterrupted success? The present Primate has had his full share of criticism; but like the stolid Scotchman he is, he has pursued his way with national caution, displaying, the while, much wise reticence and tact, as well as a broadness of view which could appreciate the pulpit oratory of a Spurgeon, and not be in the least disconcerted at the unconscious humor of a remark which afterwards found its way into Punch, as a joke at his expense, namely, that "he could not be considered an ornamental bishop;" the speaker's intention being rather to emphasize the value of their Diocesan as a worker of un-sparing activity.

The early experiences of the Archbishop of Canterbury, as a hard-working Curate at Dartford, have been perhaps a helpful factor in dealing with the difficulties of the clergy in both his former dioceses, Rochester and Winchester. The exigencies of his present position entail upon His Grace a life in a palace of almost regal splendor, with chamberlains, purse-bearers, secretaries, etc.—a household on a princely scale, maintained at a costly expenditure. But when he was Bishop of Rochester, he chose to live in "unlovely Kennington," as being in the heart of his diocese, using "third-class" by rail, and the top of omnibus and tram-car, as being the most convenient and



Life's Opportunities.

Opportunity often seems only another word for responsibility; because in this strange life of ours much that we have a chance to do becomes a clear and positive duty. "Each day, each week, each month, each year is a new chance given you by God. A new chance, a new leaf, a new life—this is the golden, the unspeakable gift which each new day offers to you." This from Canon Farrar, which puts each division of time with its glorious chances in the light of a great gift, also suggests the absolute duty of making the most and the best of such a gift. As years roll on, and life presses with its burdens of cares, griefs, and duties, it is an encouraging thought that every period of time may be regarded as a new chance to start afresh, with better aims, more deserving purposes, and higher aspirations than those of yesterday or the day before. It is a great help to garner in the memory the helpful thoughts and suggestions of others. In the hurry of every day's work and absorbing anxieties, there is too frequently but little time to puzzle out many of the perplexing problems that vaguely hint their own significance, yet elude distinct and satisfying definition. Then in the carefully written book, or the sensible article in the paper or magazine, out flashes the very sentence needed to set matters forth in a clear, convincing, wholesome light. Sir Walter Scott preaches a whole sermon in less than two lines of print, in saying "Many of our cares are but a morbid way of looking at our privileges." How many a man worries over the work and entanglements of a business career. How many women fret and murmur over the enforced exertion involved in housekeeping and maternal responsibilities. Yet what would life become if suddenly the ability to prosecute business utterly failed the busy, driving man, who after all is privileged in that he can attend to the necessary, legitimate work of mixing with other men, and taking his chance in the great, restless, throbbing world of barter and of trade. And if the mother—alas for some of them!—should all at once find herself released from a large portion of household duties and the ceaseless toil incident to the grand position of wife and mother, and that perchance through the removal of some of the members of the dear household circle, how would both heart and hands long and suffer for the beloved privilege of ministering to the usual requirements of each and every one, and of each and every day.

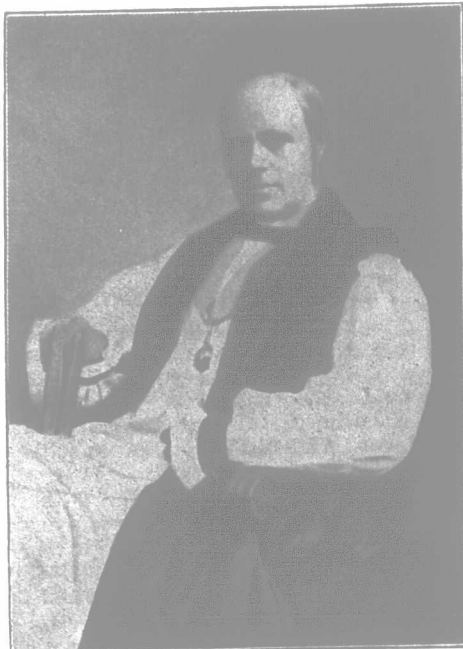
Responsibility and care are looked at time and again as mortal enemies, but they are not: they are helps and friends in driving out discontent, keeping the springs of life and action in healthful play; and let them but be missed awhile, and only too gladly and thankfully the energies would spring to the daily task with never a suspicion of a murmur or complaint. Sooner or later the fact reveals itself that there is but very little satisfaction or benefit in living a selfish, one-sided kind of life. We need support and help from each other all the way along. Never a day but some new chance offers itself to make living a bit easier for someone else. No one so humble or unlearned but they can shoulder one of life's most sacred and binding duties—that of helping someone else. A most excellent rule for everyone to consider, but whose author we do not know, is this: "The best recipe for going through life in a commendable way is to feel that everybody, no matter how rich or how poor, needs all the kindness he can get from others in the world." It truly, as is often crudely remarked, takes all kinds to make a world:

"And God, who studies each separate soul,
Out of commonplace lives makes His beautiful whole."

There can be but little doubt that as life draws toward the close, the chief gratification of retrospect will be in remembering such good and kindly deeds as may have been done for others, and it might have been said that the recipe quoted above was not only the most commendable way to go through life, but was also the most satisfactory, and the one that would pay the best in the long run. There is so much heartache, so much hidden sorrow, small chance exists of offering an unwelcome or unneeded kindness to either rich or poor. Riches are powerless to make happiness of themselves, and are equally powerless to ward off sickness, danger, or death. Pleasure can never satisfy the soul, and a disposition to shirk the stern duties and responsibilities, as well as the golden opportunities life affords, will only end in sorrow and disappointment at last.

"Rouse to some work of high and holy love
And thou an angel's happiness shalt know
Shalt bless the earth; while in the world above,
The good begun by thee shall onward flow
In many a branching stream, and wider grow;
The seed that in these few and fleeting hours
Thy hands unsparing and unwearied sow,
Shall deck thy grave with amaranthine flowers,
And yield thee fruits divine in heaven's immortal bowers."

—Selected.
HOPE.



The Most Reverend Randall Thomas Davidson, D. D.

Archbishop of Canterbury, and Primate of all England.

The Aim.

O Thou who lovest not alone
The swift success, the instant goal,
But has a lenient eye to mark
The failures of the inconstant soul.

Consider not my little worth,—
The mean achievement, scamped in act,
The high resolve and low result,
The dream that durst not face the fact.

But count the reach of my desire.
Let this be something in thy sight:—
I have not, in the slothful dark,
Forgot the Vision and the Height.

Neither my body nor my soul
To earth's low ease will yield consent.
I praise Thee for my will to strive,
I bless my goad of discontent.

—Charles G. D. Roberts, in The Book of The Rose.

from about his neck they saw that Molly was dead.

They would so willingly have kept him on, at least for a day or two till he should have recovered somewhat from the shock of the first sad awakening, but the old man was firm. The little attic room was his for a week or two longer and then—why, then there was the "House," he said; the dreaded law of separation had lost all power to hurt him now; he would just take one more look at her and then go home.

They went with him to where she lay, the matron and the doctor; not the friendly young doctor of the morning, but another whose face looked unsatisfied and tired. Something had gone amiss with his life-springs of late, and since then he had ceased to believe in the divine possibility of good, either human or divine, and now he eyed Timothy with a half-curious, half-pitying gaze.

The latter shed no tears, had shed none indeed since first they broke the news to him; the comfort of them might come later, perhaps, and there was time enough.

He stood by her side now, perfectly composed and calm, scanning earnestly each still feature as though to learn it the better by heart. Then he laid his honest, old, work-worn hand on hers and kept it there for a moment.

"The ring," whispered the doctor to the matron, "it may buy him a drop of comfort at least. Let him have it."

She hesitated; then touching Timothy gently on the arm she pointed to it.

"You will like to have it, perhaps?" she asked softly.

He glanced down at it, such a poor little line of gold, worn thin in long and loving service for him, and shook his head.

"Thank you, ma'am," he answered gratefully. "You're very kind, but I'd rather not. Come good or ill my old woman would never part with that, and I won't take it from her now." He hesitated for a moment, then gaining courage as he looked into the matron's sympathetic face, he continued:

"If I might make so bold, ma'am, would you let me have my dear girl's bonnet?"

Very tenderly she gave it to him, such a poor old rusty thing, and he received it reverently as we do something that is sacred and very precious; then with a grateful "thank you, ma'am," he turned to leave the room. He glanced toward the doctor as though to bid him good-bye too, but he had moved off from them, and seemed busy over something at the further end of the ward. So Timothy went away.

He had almost reached the great outer hall when he heard the sound of hurrying footsteps behind him and his own name spoken, and turning round he saw the doctor.

The latter looked at him silently for a moment, and there was an expression on his face that had been wanting there of late.

"Will you shake hands with me?" said the doctor.—[A. M. Cameron, in the Ladies' Journal.]

The Old House.

The old lawn, the old trees,
That years have left behind,
The garden all abloom with flowers,
I often see in mind.

The jessamine and columbine,
Their graceful tendrils flung
Around the old veranda post,
Where the robins raised their young.

The old house in tottering age,
Grown gray with family cares,
Ghosts gather round thy hearth at night,
Walk up and down the stairs.

Time unlocks treasure vaults to those
Whose right it is to come,
But to the curious stranger
The dear old walls stand dumb.

And down the empty fireplaces
The east wind makes its moan;
Come out and softly close the door,
Leave the old house alone.

The best dressing for vegetables when they are at their best is butter, pepper and salt.

certain way of "getting into touch with the man in the street."

APPEARANCE AND PERSONALITY.

Because of his somewhat homely figure and ruddiness of face, the appellation of the "Northern Farmer" was given him in earlier years; but he never was a man who could be passed unnoticed in a crowd, nor one whose voice could be unheeded in private conversation or in public debate. His manly speech in the House of Lords did much to help through the passage of the Shop Assistants' Seat Bill. . . . "When gray-haired legislators were gravely arguing that a dangerous commercial precedent might be made if the weary shop-girl was permitted a seat behind the counter, the Bishop, having first taken the practical course of visiting a dozen or so of London shops, and interviewing employers and employees, became the champion of the young womanhood of that day. He has also been a consistent advocate of temperance reform, and a friend to the movement for the higher education of women."

HIS LIBERAL-MINDEDNESS.

It has always been a characteristic of the present Archbishop that he has shown a friendly attitude towards non-conformists, being ever ready to see both sides of every question. He created some criticism amongst less liberal-minded churchmen by attending Mr. Spurgeon's funeral, and pronouncing the benediction at the grave. Ministers of all denominations were welcomed to his homes, both at Kennington and Farnham Castle, and he has, on more occasions than one, extended hospitality to the members of non-conformist gatherings in his district.

In Mrs. Davidson, the daughter of Dr. Tait, his predecessor, the present Archbishop has an ideal wife, by taste, intuition and early-training. She is in every way fitted to be a helpmeet indeed; using, meanwhile, the many opportunities afforded by her exalted position, to further every philanthropic effort for which her influence is sought; more especially if it be in the interests of women and girls.

As Canadians, perhaps, we may feel some regret that the primary object of the first visit ever paid over seas by an Archbishop of Canterbury should not be as our guest, and that so very little time can be allotted to our glorious Dominion. He has made a short stay at Quebec, Montreal and Toronto, and we may rest assured that to an eye so keen to observe, a mind so open to impressions, and a heart so loyal to the Empire, full justice will be done to the land of which we are so proud when Dr. Randall Thomas Davidson relates the varied experiences of his trip across the Atlantic in the year of grace, 1904.

H. A. B.

Humorous.

"Meddisin' chests!" said the old retired skipper, with a snort of contempt. "Hi didn't 'ave no such tomfoolery aboard my ship wen Hi were a-goin' to sea. Ketch me a-coddlin' of my croo. No, sir! If so be as wun of the 'ands was feelin' queer, Hi sez to 'im, 'Were's the pain? Is it above the belt or below the belt?' If 'e sez it's above the belt, Hi gives 'im a hemmetic; if 'e sez it's below the belt, Hi gives 'im a dose o' Hepsom sorlits. Turn my ship hinto a chemist's shop! Not me, sir."

WHY THE CONVICT LOVED THE RAT.

A party of estimable women made a tour of the prisons in New Jersey. They were investigating to see what they could do to relieve the hard lot of the convicts.

They came to a particularly vicious-looking man, who was doing twenty years for burglary. He had a tame rat in the cell with him, and apparently was very fond of it.

"My good man," said one of the visiting ladies, "are you fond of that rat?"

"I love it better than anything in the world," said the convict.

"There!" said another of the ladies; "I have always claimed there is a way in which these men, no matter how hardened in crime, can be reached. Here is a man who loves a tame rat. Now, my good man, will you tell us why you love this rat?"

"Why, of course; because he bit the warden," said the convict.



Who was to Blame?

"Where's Dorothy? Do you know, Jack?"

Just see if you can find her, dear; She went up stairs an hour ago, And is in mischief now, I fear."

"All right! Where are you, Dot?" cried Jack,

As lightly up the stairs he ran, "What's up? Oh, my! You're jolly wet!"

Where are you going with that can?"

The little maid defiant stood, With crimson cheeks and ruffled hair, Two small hands grasped a bedroom chair, The baby face was full of care.

"I only struck one tiny match, It blazed up very dreadful fast!" Jack darted to the trunk-room door, And for a moment stood aghast.

A mattress had been filled with straw, And on the floor left, yesterday, Some half-burnt matches, strewn about Upon an old portmanteau lay.

A newspaper was all in flames, Some scattered straw was blazing too. An emptied cup of water showed What Dorothy had tried to do.

"Two times," she said, "I filled it up— The bath-room was so far away— I don't fink water's very good For putting fires out, anyway."

But stronger hands put out the fire, Before much damage had been done, And naughty Dot was sent to bed A good full hour before the sun.

That night upon her father's knee, Both rosy feet within his hand, And arms clasped tightly round his neck, She tried to make him understand.

"Dear daddy, it was not my fault," She pleaded with a heavy sigh, "I fink that muvvers ought to keep Their bad old matches 'way up high!"

COUSIN DOROTHY.

Puzzle Competition.

The puzzles and riddles sent in by our young readers were so well selected that it has been found difficult to award the prizes. The winners: Minnie Hunter, Boxall, Ont.; Margaret Anderson, St. Augustine, Ont.; Lloyd MacHardy, Fergus, Ont.

Other competitors deserving very honorable mention are: Maggie McWilliam, Elma Girwin, Samuel Meek, Hattie Sleep, Pearl Jose, E. J. Miller, Nellie Hodgins, Lauretta Morton, Genevieve Armstrong, Brownie, Blanche Blackburn, Mae Smithers, Mary Ann Swift, Bruce Nisbet, Nettie Butler, Elizabeth Eaton, Mabel Smail, Mabel Weidenhamer, Dora Williams, Loren T. White, Eva Hooper.

I shall publish some of the riddles and puzzles each week, and prizes will be given at the end of the month to the boy or girl under 16 years of age who sends in the neatest list of correct answers. Solutions of September problems should be sent in all at once, and must be postmarked not later than October 15th. Enclose name, age, and address, and write on one side of the paper only. MSS. sent as "Printer's Copy" should always be left unsealed.

COUSIN DOROTHY.

Box 92, Newcastle, Ont.

Puzzles and Riddles.

I. ACROSTIC.

- A small insect.
- A color.
- An open way.
- A large quantity.
- To resound.

- A border.
- A river in France.
- A mineral salt.
- A girl's name.
- Running risk.
- A play set to music.
- A familiar word for cousin.
- Elsewhere.
- A prickly shrub.
- A bird of prey.
- Primals and finals spell the name of my favorite magazine.

II.

Anagrams form the titles of Sir Walter Scott's novels.

- 1. At the pier.
- 2. Every law.
- 3. Ho! a vine.
- 4. They stream on.
- 5. Both beat.
- 6. Quit thy arena.
- 7. Gold causes a rent.
- 8. Gentle Truda.
- 9. The debt to her.
- 10. My gun, is anger.

III.

CHARADE.

My first in many a field doth grow— Most easy 'tis to guess; Without it we should come to woe, To trouble and distress. My second in a farmer's barn You very oft may find; And when I say 'tis made of yarn, It may come to your mind. My whole is but my second, too, And used to carry in My dear and precious first; so you To guess may now begin.

IV.

A question I will ask of thee, Come answer if you please, Tell in what chapter there's a verse With two and fifty 't's? (Answer will be found in the Bible.)

V.

Why should we never sleep in a railway carriage?

Help One Another.

A thimble, a needle, and a piece of thread were all lying on a lady's work-table together. Now the needle had rather a hasty temper, and could give sharp pricks when it pleased, and this morning it was out of sorts; so it tried to pick a quarrel with the thimble, and said spitefully, "You gave me some hard knocks yesterday, and I wish that you would be more gentle in future." "It is true I do push you hard sometimes," answered the thimble; "but you know it is only when you do not do your work properly, and our mistress makes me keep you up to it." "Pray don't you two quarrel," said the thread, wishing to be peacemaker. "You mind your own business!" retorted the needle. "My business is your business," said the thread, "for you are no use without me, and I am none without you." "That's just it," said the thimble. "A great deal of nonsense is talked in this world about being independent; but my own opinion is that people should try to help one another, for from the highest to the lowest we are all very dependent on the good services of our neighbors for something or other every day of our lives."—Little Folks' Magazine.

"There is a Persian story about a pessimist. This story is so old that no date can be assigned to it. It concerns a pessimistic farmer.

"Good friend," a visitor said to the farmer, "you are fortunate this year." He pointed to the heavy and rich grain-fields spreading as far as the eye could see. "You can't grumble," he went on, "about your crop this season, eh?" "No, I can't grumble," whined the pessimist; "but a crop like this is terribly wearing on the soil!"



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At your Grocer's

According to a report received at the Department of Agriculture, Ottawa, Robt. Beith, M. P., Bowmanville, Ont., carried off the principal prizes in the Hackney class at the horse show at St. Louis Exposition. Mr. Beith entered seven horses, owned by him, and his total winnings amounted to \$990, besides which he receives three diplomas. In the competition for the grand champion prize, two Canadian-bred animals took the champion prize as well as the diploma.

With the Flowers.

The Perennial Garden.

You remember how "Elizabeth" of the "German Garden" used to run away upstairs about Christmas time, lock herself in her room, and, seed catalogue in hand, proceed to make out her list of flowers for the following summer—at least so she has told us in her diary of that, to her, eventful year. Had she written another history of the garden, however, after having lived a few years longer in the old convent, we may suspect that she would have had a different story to tell. She would have learned, during those years, to begin planning for her next season's garden much earlier than Christmas-time, even, and to take the first steps towards it, probably, in September. Of late years, you know, "perennial gardens" have become quite the rage, and the planting of the roots for these should, to obtain best results, be done early in the fall so that the rootlets may have time to establish themselves and feel thoroughly at home before the chilling frosts of winter appear.

There are many things to recommend the garden of perennials. In the first place the plants are, as a rule, robust, with beautiful flowers and fine showy foliage, which remains fresh and green the whole summer long. In the second place, perennials give much less trouble than any other class of plants, requiring less watering, less shading and staking and fussing generally. Put them in, and you have them in that spot for years, their demands upon you being limited, for the most part, to a digging—about every fall, the occasional application of some well-decomposed manure, and the putting on of some litter to protect the roots from severe winter frosts. Weeds, of course, must be kept down in summer; but a method of doing this, at once pretty and convenient, is that of "carpeting," or sowing thickly about the perennials, the seed of low-growing plants, such as Alyssum, Candytuft, Pansies, etc., which usually manage to monopolize the ground to the exclusion of the weeds.

Last of all, perennials are really the most economical plants in the end. One root, of course, costs as much as and perhaps more than two or three papers of the seed of annuals; but when you have a perennial once, you have it for good. Moreover, it will keep adding to itself and spreading out into a clump, which, after a very few years, may be divided, and the nucleus of perhaps a dozen similar clumps thus formed. Of course, you may plant the seed of perennials, if you choose, and so have your garden at much less cost still; but, as the plantlets seldom bloom the first year, most people prefer to purchase the roots.

In choosing your perennials, the first step is to send for a catalogue—a card to any of the nearest seedsmen will bring one in short order. Now, decide upon the color scheme for your garden; the colors you want, and where you want to put them—remember, a promiscuous border made up of reds, blues, pinks and yellows will never look well—you must strive to have artistic effects as well as beautiful flowers in your garden; and lastly from the catalogue make out your list. Possibly you may not feel like ordering more than three or four roots each fall, but even so, you will wonder how quickly your nooks and borders will fill up. If you are not familiar with the names of the flowers, the following list may help you. You can scarcely be disappointed in choosing any from it.

- Pink—Perennial Phlox, Sea Pinks, Daisies, Pink Peonies, Dicentra or Bleeding Heart.
- Crimson—Crimson Perennial Phlox, Crimson Peonies.
- White—White Peonies, Perennial Candytuft, White Columbine, Day Lily, White Canterbury Bell, Anemone, White Iceland Poppies, Gypsophila, Arabis, Candidum Lily, Lancifolium Album (White Garden Lily).
- Light blue to purple—Iris, Purple Canterbury Bell, Violets, Perennial Larkspur, Aconitum, or Monk's Hood.

Yellow—Yellow Iris, Golden Glow, Coreopsis, Gaillardia, Golden Saxatile, Yellow Iceland Poppy, Lemon Lily.

Orange-red—Varieties of Oriental and Iceland Poppies, Tritoma, Tiger Lily.

You will notice I have included many of the "old-fashioned" flowers in the above list, but the old-time favorites are very popular just now, and well worthy are they of all the favor that may be shown them. Among them may be mentioned Foxgloves and Hollyhocks, both of which, although biennials, seed themselves in such a way as to take their place, practically, as perennials.

Send for your roots in good time, so that they may arrive during the latter part of September or the first part of October, and plant them immediately, if possible, on their arrival, so that they may be in no danger of drying out because of too long waiting. Be sure to put them in places where there will be plenty of sunshine, and so far from the roots of trees that there will be no danger of the plants being robbed of the nourishment which should be theirs. The beds, or borders, should, of course, be deeply dug, and should, except in those places where tuberous-rooted plants are to be placed, have a supply of well-rotted manure incorporated into the soil. Just a word more, do not apply to the "Farmer's Advocate" for roots of any kind; the "Farmer's Advocate" does not attempt to supply such things. Apply to your nearest seedsman, and you will be promptly and courteously attended to.

FLORA FERNLEAF.
"Farmer's Advocate" office, London, Ont.

RE GERANIUMS.

A flower lover writes: "Will you kindly tell me when and how to take up geranium roots to keep them through the winter, ready to set out again in the spring? Should they be kept in a dry or damp place?"

Ans.—See our issue of July 21st for full instructions re geranium culture. You may pot the geraniums and put them in a dry cellar, giving them very little water during the winter. They do not need much light, but must not be permitted to freeze. The leaves will, of course, drop off, but that will not matter; the purpose is to give the plants a good rest. If you choose, you may simply shake the most of the clay off the roots, and hang them "head down" in your cellar, re-potting them again during the latter part of the winter, and bringing them to light and heat.

What Finger-tips Tell.

It is said that broad finger nails denote a gentle-natured person inclined to be modest and unassuming.

Narrow nails denote a studious but not very gentle nature with a desire for scientific knowledge.

Small nails denote a very obstinate nature.

Round nails denote a desire for knowledge in general; a person apt to take great pride in his own accomplishments, rather hasty, yet fairly good-natured and forgiving.

Long nails denote caution, lacking confidence in human nature, decided in opinions.

White nails denote a fondness for society of the opposite sex, a not over-strong constitution and one subject to fevers.

Fleshy nails denote an idler who has a good appetite and loves sleep.

Fale nails denote one inclined to melancholy and to higher branches of knowledge.

Red nails denote a desire to command and a disposition inclined to be cruel.

Farmer's Boy—"Father, can I go to the circus to-night?"

Father—"No. 'Taint mour'n a month since yer went t' the top o' the hill to see the eclipse o' the moon. Seems to me, yew'er getting dissipated and reckless."

Fashion Notes.

It will be some time yet before the millinery openings take place, but whisperings of events yet to come are already floating about the air. In conversation with a number of milliners, "in for the wholesales," the other day, one gleaned a few ideas of our impending fate for the coming winter.

"Talk about prices!" exclaimed one girl, with a pretty, vivacious face and an enormous pompadour. "They were never so high! Oo—oo, they're enough to take one's breath away."

As a matter of fact, one was already gasping, and wondering simply if a corner in millinery had been formed on the Chicago Stock Exchange.

"What about the 'styles'?" as a change of subject.

"Oh, bigger than ever, either with broad crowns, so big that you can never get a hat-pin through them, except at the back, or with high crowns—like this—six inches they're making them in New York, but no doubt four will do for Canada."

"Are there no small shapes?"

"Very few; those that are reasonably small are very narrow, and poked away out in front."

"Hm!—sort of torpedo effect, eh?"

"I suppose so; and there are a few three-cornered affairs. For myself I don't like them; but of course they're stylish."

So she rattled on, while the listener, thinking of howling winds, swirling tempests, and the agonized dripping of headgear, such as redeemed our lives from monotony last winter, heaved a sigh of disgusted resignation.

"What about the colors?"

"Rather pretty, and—striking, I should say. Black is to be very fashionable, touched up with tangerine. Tangerine, you know (one didn't know, by the way), is a sort of burnt orange. It's to be used with everything—blue, black, gray, brown or green. Green is to be a great favorite, and terra cotta is in again. I don't like terra cotta, do you?"

"No," absently. "Say, are birds to be used this year?"

"My, yes! and wings! You ought to see the prices of the wings this season. I priced a pair the other day that looked as though they ought to be worth a quarter, and they were catalogued at \$1.25; what do you think of that? . . . And the birds, oh, we've some great birds. There's one up there with a white head, green body and blue wings."

"A rather peculiar species, surely?"

"I should think so—made up of two or three little birds, I guess. It's a shame."

Yes, it is a shame, and the little milliner had defined exactly what the thing was—a hideous creation, made up of the torn-apart bodies of three little, not only harmless, but helpful creatures—a monstrosity never seen in heaven or earth, except on the head of a woman (a terrestrial woman, granted). Some milliners will tell you that nearly all the wings and birds used for millinery are made up of chicken feathers. Don't you believe it. All of the best and "prettiest" of these hideous "ornaments," are made from real birds, or the mutilated parts of them. I have it from a well-known ornithologist that he actually saw, last winter, upon a hat—in church, at that—a thing made up of the head of a flicker, the body of a cherry-bird and the wings of a jay. One wondered why the crested head of the cherry-bird, which is so beautiful, was not left on; probably the moths had got into it before it was used.

We Canadian women shudder when we hear of the Spanish signoras attending a bull-fight; yet, honestly, would it not be just as humane to look on at a Spanish bull-fight as to see a happy little bird shot that its poor body might sit on one's hat? Long ago the writer of this gave up wearing birds, just as soon as she began really to think about it. Yet it is a fact that thousands of women, perhaps more tender-hearted than she, are continually wearing birds, or their wings, which amounts to the same thing. The reason of this is simply that these women have never stopped to consider just what they are doing. . . . Do you know that in Florida the bird hunters find the nests and stay near them, knowing that the mother bird will come back, again and again, until she is finally captured? Have you not read that the drooping, graceful feathers of the egret, so often

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

seen, are taken from that bird during the nesting season, and that every egret feather on a hat signifies a nest of little baby-birds left to starve, and cry for their mother in vain? If this does not touch you—do you not know that the birds are the great benefactors of our land; that their keen little eyes are ever on the alert for insects and seeds which would work us woe? Look back in your "Farmer's Advocate" of September 1st, 1903, and see what Geo. E. Atkinson and Clara Humberstone have to say about these things! Read any book on birds and their habits; learn to know them ever so little, and I am sure you will never again tolerate a bird or its wing on your bonnet. We have too long been blind as moles, and, possibly, more heartless: a mole, at least, feels as much as it is necessary for it to feel. Let us open our eyes, and our hearts will open also. Try to aid this work all you can. Remember, if we women arise in arms against wearing birds, or parts of birds, the trade will stop, and that is an end of it. There are thousands upon thousands of women and girls who each week read the "Farmer's Advocate"—let each use her influence in this thing, and the effect may be incalculable. At the same time remember that you may have a very beautiful hat which has not the sign of a feather on it. Velvet, ribbon, and the beautiful new chiffon velvet, in a thousand shades, will give you choice of all the variety in head apparel that you need, and enable you to go out in all innocence, conscious at once of the fact that, while you are wearing a fashionable and becoming hat, no dear little warbler has suffered the pain of death in order that you may go about flaunting a decoration so barbarous as to be well left to the savage tribes with whom such misplaced adornment originated.

With the Canadian Poets.

September.

By Archibald Lampman.

Now hath the summer reached her golden close,
And lost, amid her cornfields, bright of soul,
Scarcely perceives from her divine repose
How near, how swift, the inevitable goal;
Still, still, she smiles, though from her careless feet,
The bounty and the fruitful strength are gone,
And through the soft, long, wondering days goes on
The silent, serene decadence, sad and sweet.

In far-off russet cornfields, where the dry
Gray shocks stand peaked and withering, half concealed
In the rough earth, the orange pumpkins lie,
Full-ribbed; and in the windless pasture-field
The sleek red horses o'er the sun-warmed ground
Stand pensively about in companies,
While all around them from the motionless trees
The long clean shadows sleep without a sound.

Under cool elm trees floats the distant stream,
Moveless as air; and o'er the vast warm earth
The fathomless daylight seems to stand and dream,
A liquid cool elixir—all its girth
Bound with faint haze, a frail transparency,
Whose lucid purple barely veils and fills
The utmost valleys and the thin last hills,
Nor mars one whit their perfect clarity.

Thus without grief the golden days go by,
So soft we scarcely notice how they wend,
And like a smile half happy, or a sigh,
The summer passes to her quiet end;
And soon, too soon, around the cumbered eaves
Sly frosts shall take the creepers by surprise,
And through the wind-touched reddening woods shall rise
October with the rain of ruined leaves.

GOSSIP.

The dispersion sale of the noted Shorthorn herd of the late Mr. W. S. Marr, Uppermill, Tarves, Aberdeenshire, will be held on Oct. 11th, when the bull calves of this herd and those of Mr. Wm. Duthie, of Collynie, will be sold first, followed by the cows, heifers and heifer calves of the Uppermill herd. The sale will be without reserve, no test, and terms cash. It will doubtless be a great sale, and will attract a very large attendance of breeders and buyers.

An important sale of horseflesh took place at Dr. Craig's barns, Hamilton, Ont., last week. Mr. John L. Young, of Glanford, sold his stallion, Hal B. (mark 2.04), the fastest sire in Canada, for \$4,000, less the express charges to West Milton, Ohio. The purchaser was Mr. Owen Van Kirk, and he bought the animal for Mr. D. H. Mast, owner of a well-known stock farm. Mr. Mast is the owner of Hal Dillard (2.04), the sire of Hal B.

Mr. Young bought Hal B. at a sale in New York about a year ago, at a cost of \$3,100, laid down in Hamilton.

Wallace's Farmer quotes Professor Thomas Shaw, formerly of the Minnesota Agricultural College and editor of The St. Paul Farmer, as authority for the statement that a sow owned by him—a Tamworth—farrowed on May 9th of this year a litter of nine pigs. She nursed these until May 19th, and on that day farrowed another litter of nine healthy and strong pigs, of which she has six at the present time. Professor Shaw states that the sow was given but one service at the time of mating. His statement of the case is direct and positive, and he offers to substantiate it with the testimony of other witnesses.

Mr. W. S. Hawkshaw, of Glanworth, Ont., near London, well known as a breeder and importer of Shropshire sheep, having sold his fine Middlesex farm and purchased a farm in the Chilliwack Valley, British Columbia, shipped a carload of effects to that point last week, including a nice bunch of Shropshires, and will follow with his family this week. Before leaving his old neighborhood, he was the recipient of a valuable gift from his numerous friends. The Farmer's Advocate commends Mr. Hawkshaw to the people of Chilliwack as an honorable man of sterling character, possessed of a happy faculty of looking on the bright side of life.

Fair Queen, the roan two-year-old Shorthorn heifer, bred by Harry Fairbairn, Theford, Ont., is carrying off the highest honors in the circuit of Western State fairs, having won the sweepstakes as best female of the breed, any age, at the Missouri and Iowa State fairs last month. She will be a strong card for the World's Fair, as she was female champion at the International last year. Col. W. A. Harris, representing the Shorthorn Association, who was in the pavilion at Iowa State Fair at the time this class was exhibited, said in effect, of Fair Queen, "I consider her one of the most perfect show-yard types I have seen in many years. She has the character, depth, thickness and levelness of flesh so difficult to find in combination, and is every inch a show animal."

PRESENTATION TO C. W. SCOTT.

Recently at Mr. Henry Wade's Office, the Registrar of Live Stock, Parliament Buildings, Toronto, a presentation was made to Mr. Chester W. Scott, on the event of his leaving the employ of Mr. Wade, to accept a position with the C. P. R. Mr. Scott has been connected with Mr. Wade's office for some years and will be greatly missed by the live-stock men of the country. The gift was accompanied by an address, signed by all members of Mr. Wade's staff. Addresses were also made by the following: Mr. Henry Wade, Registrar; J. W. Nimmo, Assistant Secretary Swine Breeders' Association; H. G. Wade, Assistant Secretary Dominion Shorthorn Association; G. De Warren Greene; F. M. Wade, Assistant Secretary Clydesdale Association; R. G. T. Hitchman, Manager Toronto Scots F. C., and W. J. I. Hitchman. Mr. Scott replied in suitable words.

GO To Your Grocer and
Get a Packet of
the Famous
"SALADA"
CEYLON TEA

In Black, Mixed or Natural Green.

We will stake our reputation on your being delighted with the "Tea Pot" draw.

"IF NOT" Your Money will be refunded in Full, We Reimbursing the dealer.

DOES THIS PROVE OUR FAITH?

DISPERSION of the celebrated Whittingham Herd of RED POLLED CATTLE

JOHN THORNTON & CO. will sell by auction, without reserve, at CROWN POINT PARK, one mile from Trowse, and two miles from Norwich stations, G. E. R., on

Thursday, Oct. 20
(One o'clock),

about ONE HUNDRED pure-bred RED POLLED COWS, HEIFERS and YOUNG BULLS, being the first of the three portions into which it is found necessary to divide this very extensive herd of 300 head, kept for supplying milk to the city of Norwich. The herd has been in existence upwards of thirty years. Bred from the best milking strains, it has been crossed with Mr. J. J. Colman's Royal prize bulls, so that the herd has reached a high state of perfection. Milk records have been kept for many years. The animals are well adapted to go into first-class herds, being of large frame, fine quality and deep milkers, with good udders. Catalogues may be had of JOHN THORNTON & CO., 7 Princes Street, Hanover Square, London W., who will execute commissions.

LARGE AUCTION SALE

On the premises, four miles north-west of DUTTON, ONT., Elgin Co.

Tuesday, October 18th, 1904

the entire herd of

48 SHORTHORNS

5 Clydesdale Horses, 7 Clydesdale Mares, 30 Reg'd Yorkshire Hogs, 30 Reg'd Berkshire Hogs, 35 Reg'd Oxford Down Sheep, 50 Head Grade Cattle, 100 Head Grade Hogs.

The entire lot will be sold without reserve, as the proprietor is going West.

DAVID BENNETT, DUTTON, ONT.

BIG DISPERSION SALE.

Mr. David Bennett, of Dutton, Ont., announces in this issue of the "Farmer's Advocate" a dispersion sale of his pure-bred and other live stock, as he is going West. The offering will include his entire herd of 48 Shorthorns, 5 Clydesdale horses, 7 Clydesdale mares, 30 recorded Yorkshire swine, 30 recorded Berkshires, 35 recorded Oxford Down sheep, 50 grade cattle, and 100 grade hogs.

Settlers' Low Rates West.

Via the Chicago and North Western Ry. every day from Sept. 15th to Oct. 15th, settlers' one-way, second-class tickets at very low rates, from Chicago to points in Utah, Montana, Nevada, Idaho, Oregon, Washington, California, also to Victoria, Vancouver, New Westminster, Rossland, and other points in the Kootenay district. Correspondingly low rates from all points in Canada. Full particulars from nearest ticket agent, or B. H. Bennett, General Agent, 2 King St., East, Toronto, Ont.

TRADE TOPICS.

A GREAT BUSINESS SCHOOL.—When a school requires the services of sixteen teachers and utilizes premises aggregating nearly 2,500 square feet, divided into 20 apartments, and when it turns out and sends more than 750 students direct from its classes into good commercial positions within one year, it may fairly be considered a great business school. Such an institution is the Central Business College, of Toronto, which, under the principalship of Mr. W. H. Shaw, has grown to occupy the foremost place among such schools in our Dominion. This college enjoys a splendid reputation for thorough work, and its graduates are much sought after by business firms requiring first-class clerical assistance. The prospectus of this school is most interesting, and may be had by anyone on application by postal or letter to the principal.

A BISCUIT MISSION.—The Mooney Biscuit & Candy Co., Limited, of Stratford, Ont., now celebrating its first birthday, is an example of the growth and progress of Canadian industries. Starting a little over a year ago, with a plant which should have fulfilled all demands upon it for some time to come, the company has already had to double it. Outside of the natural growth of the Dominion, the chief reason lies in the biscuits themselves, which are known to the trade and the people as something different and better than any other biscuit on the market. Mooney's Perfection Cream Sodas, as they are called, have firmly established their reputation all over Canada. As Mr. Mooney puts it, "They are the biscuits that made all Canada cracker-hungry." People who do not fancy the ordinary soda biscuit, develop the biscuit appetite once they have tasted Mooney's. The Mooney idea is that "just as good" is not good enough. They realized at the start that their field lay in making a biscuit that would be crisper, daintier and better in every way than any other—in short, they resolved that they would make the best biscuits in Canada; tell the people about them through the press, then trust to the quality to place them on every table in the land. One has only to taste the dainty, crisp deliciousness of Mooney's Perfection Cream Sodas to discover the secret of their popularity. All grocers have them, packed in airtight, moisture-proof packages.

GOSSIP.

At Providence, R. I., Sept. 1st, 8,000 people watched Major Delmar fail to lower the world's record for trotters without windshield. He made the mile in 2.03, the record being 2.02.

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

Carnefac Fed Calves Score Another Victory AT WINNIPEG FAIR, 1904

1st PRIZE, \$100 Cash, to Wm. R. Stewart, Sarnia, Ont.: calf, age 6 mos. 20 dys; weight 770 lbs.
2nd PRIZE, \$50 Cash, to J. Herriott & Sons, Souris, Man.: calf, age 6 mos. 23 dys; weight 730 lbs.
3rd PRIZE, \$25 Cash, to Sir Wm. Van Horne, E. Selkirk, Man.: calf, age 6 mos. 20 dys.; weight 652 lbs.

These cash prizes were given for the heaviest calves, born since Jan. 1st, 1904, fed on Carnefac, and shown at Winnipeg Exhibition. They were keenly contested for by farmers and breeders. The enormous weights again demonstrate that a perfectly healthy system will grow and put on flesh at a rate heretofore unheard of. It is now freely admitted that the advent of Carnefac Stock Food has revolutionized the stock raising industry of Canada. If your dealer has not got it, write direct to

THE CARNEFAC STOCK FOOD CO.
Winnipeg, Man. 65 Front St., East, Toronto.

\$50 to California and Back

From Chicago, August 15 to September 10. Return limit, October 23. The Overland Limited and the California Express, daily, Chicago to California, via the

St. Paul and Union Pacific Line

For \$61 you may buy round-trip tickets to California, good in one direction via St. Paul, Minneapolis and Portland. Liberal stop-over privileges.

Chicago, Milwaukee & St. Paul Railway.

For Free Books and Folders kindly fill out this coupon and mail to-day to
A. J. TAYLOR, Can. P. A., 8 King Street, East, Toronto.

Name _____
Street Address _____
City _____ State _____
Probable Destination _____

New Seed Wheats

WE OFFER the following varieties of fall wheat, all of which have given satisfactory results after careful trials. All successful farmers realize the importance of a change of seed, also the necessity of growing the newest and best sorts, and we can recommend with confidence these varieties which have been grown for us by careful farmers, and thoroughly re-cleaned for our trade. All excellent samples.

NEW AUBURN.—A heavy-yielding, bearded, early red wheat, of splendid milling quality, with large, well filled heads, and thick-walled straw. Very free from attack of Hessian fly and very hardy. \$1.75 per bushel.
NEW RED CHIEF.—A grand variety, which will do well even under unfavorable circumstances. Strong fall growth; stands winter well and comes along rapidly in the spring. Heads are long, erect, bald, of a reddish-brown color, grain large and red in color. Straw strong and thick-walled; a very heavy yielder. \$1.50 per bushel.

NEW ABUNDANCE.—A splendid bald white wheat, and a great yielder; splendid quality grain; very hardy and a great stooler. Straw stiff, and stands up well. \$1.50 per bushel.

NEW PROSPERITY.—A magnificent, hardy, bald red wheat, of splendid quality, with large head, white chaff, plump grain and clean straw. \$1.45 per bushel.

CLAWSON LONGBERRY, \$1.30 per bushel.

EARLY ARCADIAN, \$1.30 per bushel.

EARLY RED CLAWSON, \$1.30 per bushel.

PEDIGREE GENESEEGIANT, \$1.30 per bushel.

DAWSON'S GOLDEN CHAFF, \$1.30 per bushel.

We also offer choicest grades of the following, specially re-cleaned for seed:
BRUCE'S LAWN GRASS SEED, 20c. per lb.
WHITE DUTCH LAWN CLOVER, 30c. per lb.

2-bushel Cotton Bags, 20c. each extra.

Our descriptive Price List of Wheats, Poultry Supplies, and Seeds for Fall Sowing is now ready, and will be mailed free of charge to all applicants.

JOHN A. BRUCE & CO., SEED MERCHANTS, HAMILTON, CANADA.
ESTABLISHED 1850.

QUESTIONS AND ANSWERS. Veterinary.

PARALYSIS.

Heifer calved in the woods, and when found could not rise. She has no use of her hind quarters. This occurred three weeks ago, and she is not any better. She eats and milks well. D. M. K.

Ans.—This is paralysis, and it is doubtful if she will get better. Load her on a stone boat, and draw her to the stable; put her in a comfortable box stall, and keep her well bedded. Turn from side to side every few hours. Give her one pound Epsom salts, and follow up with two-dram doses nux vomica three times daily. If she does not improve after two weeks' treatment destroy her. V.

Miscellaneous.

UNITING BEE COLONIES.

I have 75 colonies of bees, and wish to winter only 50 colonies. What is best to do with the extra 25? If unite, give the best way of doing it.

EPHRAIM HERN.

Ans.—Look up and kill poor queens, and unite their colonies with any that are weak, but have young queens. To unite, simply set one hive on the other as you would put on a top-story. In a week remove the poorer combs, shaking the bees all into one brood chamber.

M. PETTIT.

FEEDING BUCKWHEAT.

Will you tell me what, in your opinion, is the most profitable way to feed buckwheat, and to what kind of stock? Can it be fed pure, or should it be mixed with other grains? R. S. S.

Ans.—Buckwheat is best fed ground and mixed with oats, barley or other grains. We would not care to make more than one-third of the meal allowance buckwheat. It can be fed to cattle, horses or hogs; but it has been said that butter from cows getting large quantities of buckwheat is of poor texture, and "tallowy." Buckwheat is useful mixed with oats to fatten horses, and is particularly good for poultry.

DODDER KILLING ALFALFA.

The weed you will find enclosed grows in patches about three or four feet across in a piece of alfalfa. It twines itself around the plants, and they turn yellow and die. The alfalfa was sown last year. Is it a bad weed like bindweed or sow thistle, or can it be readily killed by cultivation? The only way we have found to kill sow thistle is to pile on about two feet of straw. E. C. W.

Ans.—This is more clover "dodder." See answer to similar query in these columns. Judging by the many enquiries we have received, "dodder" must be making headway. The perennial nature of alfalfa, no doubt, encourages the growth of "dodder."

BUCKWHEAT FOR SILAGE.

Our corn is comparatively a failure this year, so we sowed buckwheat on part of the land, and have got a good strong growth now out in flower. How would it do to put it in the silo, mixed with what corn we have?

Ans.—I know of no one who has tried to make buckwheat silage. Our experience has been that the buckwheat plants, except when very young, are not relished by cattle. Prof. Wilson states that when buckwheat fodder has been fed to cattle and sheep after it has commenced to bloom, the effects have been bad. C. A. ZAVITZ.

O. A. C., Guelph.

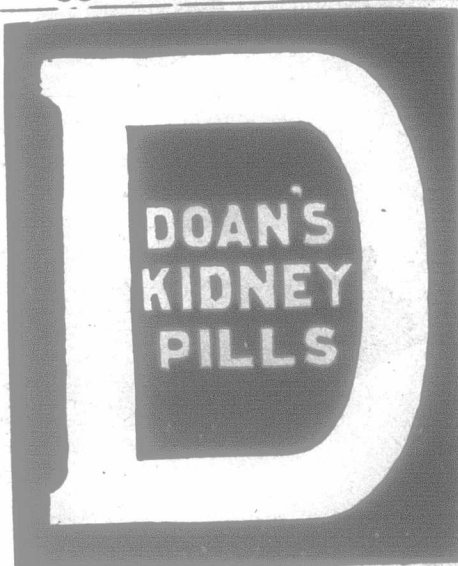
A RARE INSECT.

Would you kindly inform me through your valuable paper what the name of the enclosed insect is, also any information concerning it? M. E. M.

Ans.—This is one of the many specimens of the Phasmide, in the order Orthoptera. There are six families in this order, some of the members of which are quite well known. Typical representatives of each family are the cockroaches, the praying mantis, the walking-sticks, the locusts, the grasshoppers, and the crickets. Only the grasshoppers are of economic significance in this order. The walking-sticks are not very common northward, their home being in the tropics. They inhabit forests, and feed upon the leaves of trees. In the south they have wings, but northwards nothing but the rudiments is found.

Fruit-a-lives or Fruit Liver Tablets

are the juices of apples, oranges, figs and prunes—purified evaporated, and compressed into tablets. They never fail to cure all Stomach, Liver and Kidney Troubles. At druggists. 50 cents a box.



Are a sure and permanent cure for all Kidney and Bladder Troubles.

BACKACHE

is the first sign of Kidney Trouble. Don't neglect it! Check it in time! Serious trouble will follow if you don't. Cure your Backache by taking

DOAN'S KIDNEY PILLS. WINDMILLS



THE CANADIAN AIRMOTOR
on the farm is better

THAN A HIRED MAN.

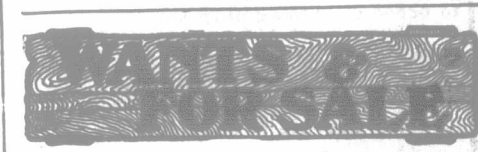
Never Tires. Never Sleeps.

Will Save You

MANY A { DOLLAR,
LIFT,
HALF DAY.

Quality Guaranteed.

Ontario Wind Engine & Pump Co.,
TORONTO, ONT. LIMITED.



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

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

WANTED, MIDDLE-AGED WOMAN for companion and mother. A good housekeeper and a Christian, with references. Address Bx 57, London, Ont.

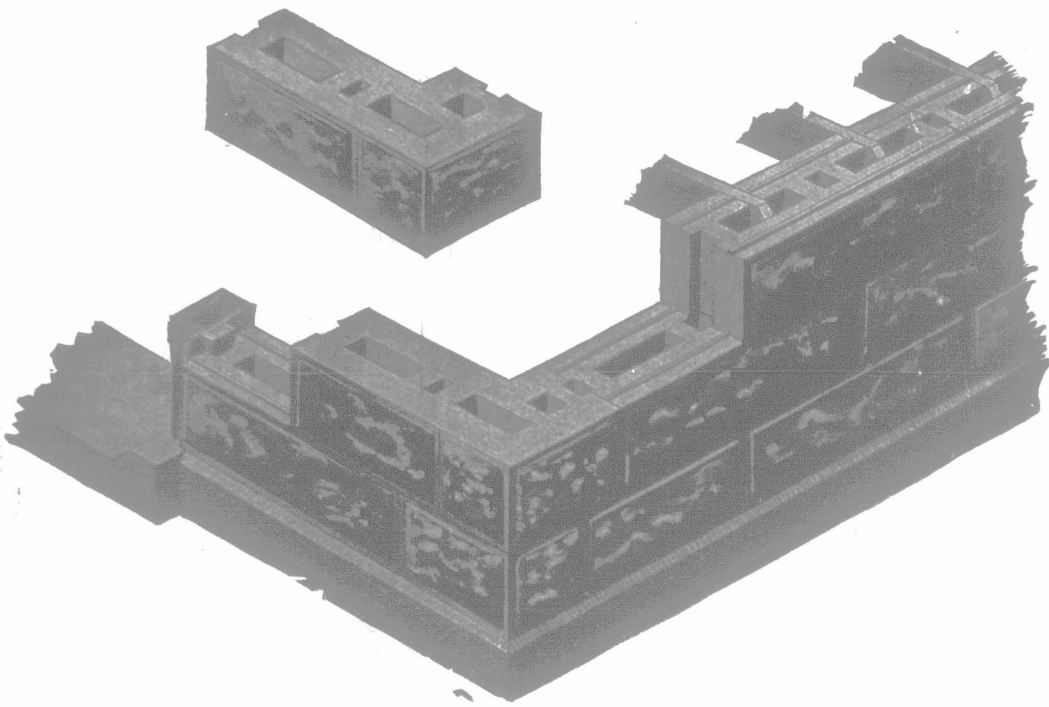
FOR SALE at a bargain if taken at once, 150 acres, good land, good buildings, well drained, plenty of fruit, near one of the best cheese factories in Oxford. Apply to W. G. Veale, Hickson, Ont.

FOR SALE—142 acres, all cultivated, buildings all complete. Two schools, cheese and butter factory close. One mile from city limits. Excellent chance for town dairy. Apply Bx 818, Peterboro.

FOR SALE—Immediate delivery. One John Abell 14-horse power Advance T action Engine and 36x50 Waterloo Separator, with water tank, driving belts, nearly new, all belts, the whole outfit in good running order. Price, \$525. The John Abell Engine & Machine Co., Toronto.

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

Make Your Own Building Stone

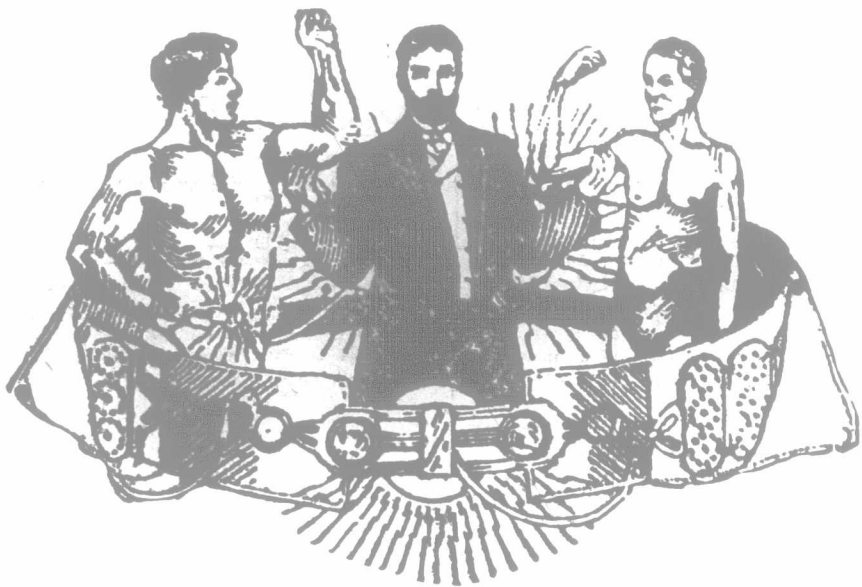


WRITE US TO-DAY FOR FULL INFORMATION AND ILLUSTRATED CATALOGUE OF THE

Normandin Building Block Machine

Makes blocks any length from 1 to 32 inches; any height from 1 to 9 inches, and makes blocks 6 in., 8 in., 10 in., 12 in., and 14 in. in thickness. Easily operated by hand and very fast. A mixture of cement, sand and water is all you require to make a perfect imitation of stone, ready for the wall in 10 day's time. Get into the cement block business now. It's a winner. The United States Government has adopted the Normandin Block Machine. Our travellers are on the road now. Write us if you are interested.

THE CEMENT BUILDING BLOCK CO., LIMITED
P. O. Box 540. Winnipeg, Canada.



HOW I CURE WEAK, PUNY MEN

Give me a man broken down by dissipation, hard work, or worry, from any Cause which has sapped his vitality. Let him follow my advice for three months and I will make him as vigorous in every respect as any man of his age. I will not promise to make a Hercules of a man who was never intended by nature to be strong and sturdy. Even that man I can make better than he is; but the man who has been strong and has lost his strength I can make as good as he ever was.

I can give back to any man what he has lost by abuse of the laws of nature. A man who is nervous, whose brain and body are weak, who sleeps badly, awakes more tired than when he went to bed, who is easily discouraged, inclined to brood over imaginary troubles, who has lost ambition and energy to tackle hard problems, lacks the animal electricity which the Dr. McLaughlin Electric Belt supplies.

The whole force of vitality in your body is dependent upon your animal electricity. When you lose that in any manner my Belt will replace it, and will cure you.

"My rupture is entirely gone."
WM. E. GOOD, Indian Head, Assa.

Letters like that tell a story which means a good deal to a sufferer. They are a beacon light to the man who has become discouraged from useless doctoring. I get such letters every day.

My Belt has a wonderful influence upon tired, weak nerves. It braces and invigorates them and stirs up a great force of energy in a man.

I make the best electric body appliance in the world, having devoted twenty years to perfecting it. I know my trade. My cures, after everything else has failed, are my best arguments.

"Your Belt cured me of weak back and indigestion."
ERNEST R. SAUNDERS, Bresaylor, Sask.

They come every day from everywhere. There is not a town or hamlet in the country which has not cures by Dr. McLaughlin's Electric Belt.

It's as good for women as for men. Worn while you sleep, it causes no trouble. You feel the gentle, glowing heat from it constantly, but no sting, no burning, as in old style belts.

Call to-day or send for my beautiful book, full of the things a man likes to read if he wants to be a strong man. I send it sealed free. My Belts are not sold in drug stores.

DR. M. S. McLAUGHLIN, 130 Yonge St., Toronto. Office Hours:—9 a.m. to 6 p.m.; Wednesday and Saturday till 8:30 p.m.

TO SECURE THE BEST RESULTS Place an Ad. in the Farmer's Advocate

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

GOSSIP.

'Tis fair time in the country, and how our city cousins do love their suburban aunts and uncles.

The first annual meeting of the American Milch Goat Record Association will be held in the Live-stock Congress Hall, World's Fair grounds, St. Louis, Wednesday, Oct. 12, 7.30 p. m.

Milch goats will be on exhibition at the World's Fair, Oct. 3rd to Oct. 15th, and the date fixed for the public sale of milch goats is Thursday, Oct. 13th.

ZENOLEUM is being used by order of the directorate of the Toronto Industrial Exhibition to disinfect the stock buildings and closets on the exhibition grounds, under the direction of the Zenner Disinfectant Company, of Detroit, the manufacturers, who have also been given the contract to perform the same service at the Western Fair, at London, next week. Not only as a disinfectant, but also for the destruction of ticks on sheep and lice on cattle, and for the cure of eczema, scab and all skin diseases, Zenoleum has won a splendid reputation.

In another column of this issue will be found a photo-engraving of Callonell and Sea Bird, the famous prizewinning roadster team owned in the noted Chilliwack Valley, B. C., by J. T. & J. H. Wilkinson. They are both registered in the Standard-bred Studbook, and are full sisters, by Colloquy, out of a Book-maker mare. They stand sixteen hands in height, with clean-cut heads and necks, splendid depth and fullness of chest, strong backs, and a set of limbs of the kind that makes good roadsters admired. Above all, this pair is possessed of a symmetry and style which places them in a class by themselves, and at no time do they show their good breeding and training better than when in motion. They have been shown since foals, and have won many large prizes, and this year they topped the list by landing first for gentleman's turnout, and the highest honors in the road class. Wilkinson Bros. showed several other choice Standard-breds at the Dominion of Canada Exhibition, and won a fair share of prizes. Among these was a brood mare and foal, a three-year-old mare, and a two-year-old stallion. In sheep also the same breeders had a choice flock of Southdowns, with which they brought honor to the Province at the Pacific coast.

If you do not use an incubator you are neglecting one of the greatest profit-producing departments of your farm. There is always a big demand for chickens. The greatest success in poultry raising has been achieved with the

CHATHAM INCUBATOR

It has a record of hatching out every fertile egg put in it. It is the perfect incubator and requires the least watching.

We sell the Chatham Incubator on very easy terms. We'll ship one anywhere in Canada—freight prepaid—and let you have three years to pay for it. It will make many times its cost in that time.

Write for full particulars and catalogue to
M. CAMPBELL FANING MILL CO.
Dept. 251 Chatham, Canada.

SAVE THE CHICKS.
The world's record in chick raising—the most and the best—is held by

Puritan Chick Food.

One feeding is not the best in the world. Try it five. Send for catalogue today.

Puritan Poultry Farms & Mill, Co., Stamford, Conn.
A. J. ROSSMAN, London, Ont., Sole Distributor for Canada.

A. E. SHERRINGTON
WALKERTON, ONT.

Importer and breeder of **BARRED P. ROCKS** exclusively. Eggs, \$1.00 and \$1.50 per setting of 13.

BARRED ROCKS and PEKIN DUCKS

We can supply show and breeding stock this season at reasonable prices. Write:

H. GEE & SONS, SELKIRK, ONT.

MONEY

Won't buy it, but we will send "FREE" to any address our "Farm Pamphlet," which contains valuable information regarding

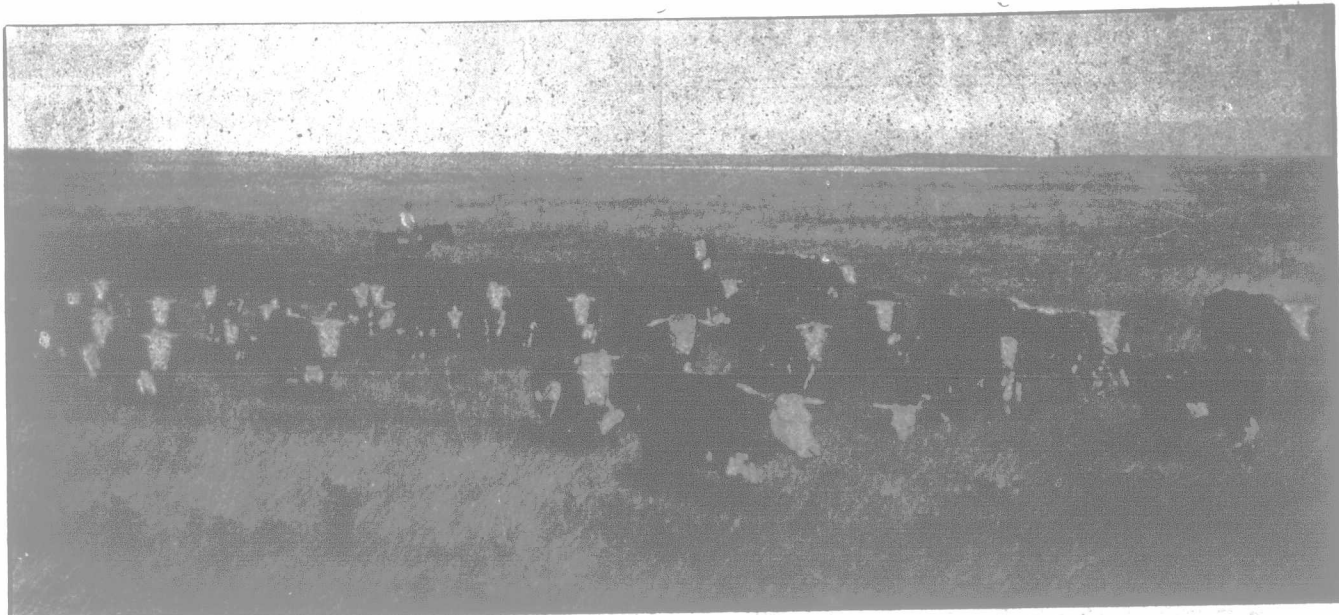
British Columbia Farm Lands

In the far-famed LOWER FRASER VALLEY, "THE GARDEN SPOT OF CANADA."

F. J. HART & CO.,
Real Estate Agents,
NEW WESTMINSTER, B. C.

C. P. R. LANDS

The Canadian Pacific Railway Company have 12,000,000 acres of choice farming lands for sale in Western Canada. Manitoba and Eastern Assinibolia lands generally from \$4 to \$10 per acre, according to quality and location. South-western Assinibolia 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.



Hereford Cattle, Crane Lake, Assinibolia, Main Line Canadian Pacific Railway.

\$6 LANDS: 100 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 of the purchase money down, and the 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.

QUESTIONS AND ANSWERS.
Miscellaneous.

PROTECTING PEACH TREE.

Kindly say how a young peach tree should be protected in the winter.

J. H.

Ans.—Wrap the trunk with long wheat straw, and extend the wrapping to the main branches. If the ground is usually covered with snow during winter, no further protection need be given; but if not, a coat of long horse manure spread about the foot of the tree will be useful. Of course, if the location is so far north that the twigs are killed each season by frost, it is no use trying to bring the tree along.

WEED MAKING HEADWAY

Please give name and habits of life, also cultivation necessary to eradicate the enclosed weed. It is the first I have seen. Is it a bad weed? D. C.

Ans.—This is a specimen of tumbling mustard (Salsola Kali tragus). It is a very noxious weed, the plants being blown over the ground spread their numerous seeds at a marvelous rate. Cultivation and hoed crops as for wild mustard and thistles, together with spraying, are the methods of eradication.

WEED KILLS OUT CLOVER

Enclosed find specimen of what we think the worst weed yet. It is found in the lucerne, spreads in a circle, killing the clover as it goes. T. M.

Ans.—This plant has clinging, twining stems, reddish brown in color, no leaves, but with whitish flowers about one-half inch in diameter. It is the dodder of clover; a parasitic plant that feeds on the juices of its host. It is an annual, produces seeds, and dies. Where the land becomes filled with seed, it is necessary to stop growing clover for a few years. On small patches in a field it could be smothered out with a pile of straw. On alfalfa or alsike clover crops, it is more tenacious than on crops of the annual red clover; where the former are badly infested, they should be plowed up and a variety of crops grown. The seed of dodder is disseminated with that of all the clovers. There is also a variety that grows on flax.

Free for a Post Card

It costs just **one cent** for you to get relief from Kidney and Bladder Troubles. A simple request on a post card brings a free sample box of Gin Pills. We don't ask you to buy. Simply try Gin Pills at our expense, and let them prove themselves all that we claim for them. And we know the samples will do you so much good that you will voluntarily buy Gin Pills until a complete cure is effected. We intend to give away

100,000 Boxes Free of Charge

in order to show our confidence in this remedy. We know what Gin Pills will do. We have implicit confidence in their power to relieve and cure all Kidney and Bladder Troubles. We know that you have only to try them to believe in them.

Gin Pills Never Fail to Cure.

All over Canada, Gin Pills are known as a certain and speedy cure for Inflammation of the Kidneys; Gout and Rheumatism, caused by uric acid in the blood; Catarrh of the Bladder; Painful and Suppressed Urination; "Burning" Urine; Gravel or Stone in the Bladder; Bed Wetting; Pains in the Back, and all other Kidney and Bladder Troubles.

Each Gin Pill contains all the medicinal pro-

perties of one and a half ounces of best Holland gin, without the alcohol, and combined with other curative agents of recognized value.

Don't Delay—Write To-day.

Don't put this off. If you have any of these troubles, don't run the risk of Bright's Disease or Chronic Cystitis. Write for a free sample of Gin Pills, and start yourself along the road to a certain cure.

Use a post card, ask for a free sample of Gin Pills, say in what paper you saw this advertisement, and sign your name and address. Write to-day—now—to

BOLE DRUG CO., Dept. V, Winnipeg, Man.

HOOF TOO LONG.

Colt is about three months old. Hoof is not as large on outside of hind foot as inside, and the leg is swinging out.

V. H.

Ans.—Pare regularly; keeping the foot as level as possible.

GOSSIP.

The next annual meeting of the American Oxford Down Record Association will be held Tuesday, October 11th, 7.30 p. m., in the Live-stock Congress Hall, World's Fair grounds, St. Louis; and the date fixed for the public sale of Oxford

Down sheep is Wednesday, October 12, 1904.

A Baltimore gentleman offered \$4,500 for the Canadian pacer, Sam Rysdyk, 2.11½, the past week, but the answer was "neigh."

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

Farmers, Attention!

Do you propose sending one of your boys to the Agricultural College this year? If so, write for circular at once.

G. C. CREELMAN, PRESIDENT AGRIC'L COLLEGE, GUELPH, ONT.



FIRE PROOF BUILDINGS
 are rented far more quickly than others. Besides the insurance premium is brought down to the lowest possible figure. Metal ceilings and wall decorations render the interior of your building fire-proof. They also add a beauty and attractiveness which wood and plaster fail to give. The expense and annoyance of constant repairing is done away with. Our catalogue will interest you. It's yours for the asking.
THE PEDLAR PEOPLE, Oshawa, Ontario.

QUESTIONS AND ANSWERS. Veterinary.

UMBILICAL HERNIA.

Three-months-old horse colt has a navel rupture. I can return it, and put three fingers into the opening through which it escapes. C. L. L.

N. S.

Ans.—When the opening is as large as in this case, it is not probable a spontaneous cure will result. I would advise you to try a truss. Put a leather or strong linen bandage about four or five inches wide around the body. Make a pad about the size of a small deep saucer on the bandage to fit over the rupture to keep it in the abdominal cavity. Have straps and buckles or strings to fasten the bandage so that it can be regulated; attach straps or strings from anterior margin of bandage, both above, on the fides and below, to a strap around the neck to keep truss from shifting backwards. It is a case where a man has a chance to exercise his ingenuity. The idea being to arrange the truss so that it will not shift, and at the same time not have it tight enough to scarify. Keep this on for three or four weeks, and if it does not effect a cure, have your veterinarian apply a clam. This is done by casting and securing the colt on his back, returning the intestine carefully into the abdomen, and applying a clam tightly on the loose skin, letting the patient up, and allowing the clam to slough off. None but a veterinarian should attempt this operation. V.

TRADE TOPIC.

WHERE WOOLLEN GOODS ARE CHEAP.—At Chatham, Ont., there is a manufacturer of woollen goods who is prepared to sell direct to the consumer and thus save him the middlemen's profits. The list of goods offered is enumerated in an advertisement in another column, and we would recommend our readers to look it up and negotiate before purchasing the winter's supply of blankets, dress goods, etc., etc.

Spavin and Ring-bone
 Once hard to cure—easy now. A 45-minute treatment does it. No other method so easy, quick and painless. No other method sure.
Fleming's Spavin and Ringbone Paste
 cures even the very worst cases—none too old or bad. Money back if it ever fails. Lots of information if you write. Book about Spavin, Ringbone, Curb, Splint, Bog Spavin and other horse troubles sent free.
FLEMING BROS., Chemists, 45 Front Street, West, Toronto, Can.

\$100 REWARD
 for any case of colic, curb splints, contracted or knotted cords, recent shoe boils, splints or callous that cannot be permanently and positively cured. If directions are followed, by
TUTTLE'S ELIXIR.

It relieves and cures Spavins, Ring Bone, Cockle Joints, Sore Shins, Grease Heel, Founder, Sore Backs and Shoulders, Bruises, Wire Cuts, Collar and Saddle Galls, Pneumonia, Distemper, Chafed Places, etc. Used and endorsed by Adams Express Co., Chicago Fire Department and others. Tuttle's American Worm Powders never fail. Tuttle's Family Elixir stops the pains and aches of mankind instantly. Our 100-page book, "Veterinary Experience" free.
Tuttle's Elixir Co., 66 Beverly St., Boston, Mass.
 Beware of all other Elixirs. Tuttle's is the only genuine. Avoid all blisters; they are only temporary relief.
LYMAN, KNOX & SON, AGENTS, Montreal and Toronto, Canada.

DEATH TO HEAVES
 NEWTON'S Heave, Cough, Distemper and Indigestion Cure. A veterinary specific for wind, throat and stomach troubles. Strongly recommended. \$1.00 per can. Dealers, Mail or Ex. paid. The Newton Remedy Co., Toledo, Ohio.



DE LOACH PAT.
TRIPLEX HAY BALER. SELF-FEEDER. LOW IN PRICE
 For Hand, Horse or Belt Power. Leverage 40 to 1. Bales quicker, easier and more solid than any other. Also Grinding Mills, Water Wheels, Saw Mills, etc. Catalogue free.
DE LOACH MILL MFG. CO., NEW YORK Box 932, Atlanta, Ga. ST. LOUIS

NO. 1 HARD WHEAT!

AS USUAL

Last Mountain Valley

is producing an average crop of
25
 BUSHELS PER ACRE
 No. 1 HARD



NO RUST.
 NO FROST.
 Buy in a Thoroughly Tested Locality.

"HARVESTING ON THE PRAIRIE."

Machine men say, "STRASSBURG FARMERS ARE CASH CUSTOMERS." Write, and we will send you our new book, "THE LAST WEST," and Map, FREE.

WM. PEARSON & CO., 383 Main St., WINNIPEG

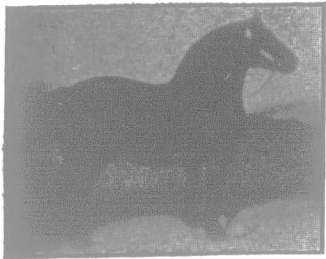
In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE

THOROLD CEMENT AND PORTLAND CEMENT

FOR BARN WALLS AND FLOORS, HOUSES, SILOS, PIGPENS, HENHOUSES; AND SEWERS, TILE, ABUTMENTS AND PIERS, 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.

PERCHERONS



We have a choice lot of pure bred Percherons for sale, ranging from 2 to 4 years of age, with size and quality. 1 colt not 2 yet, weighs 1,600 lbs. He won 3rd place at Chicago last fall with colts nearly 4 mos. older. Other prizewinners in our bunch. Prices right; terms easy. All horses guaranteed. Come and see us or write. Address:

I. A. & E. J. WIGLE, Kingsville, Ont.

WHY NOT IN CANADA?

STEVENS' OINTMENT has had over half a century's success with horses in England and other parts of the world.



AUSTRALIA alone uses over 6,000 boxes a year. CURES: Splint, Spavin, Curb and all enlargements. Retailed by chemists at a low price, 75c. small, \$1.50 large box. A little goes a long way. Get a box now. If your local chemist cannot supply you, write direct to

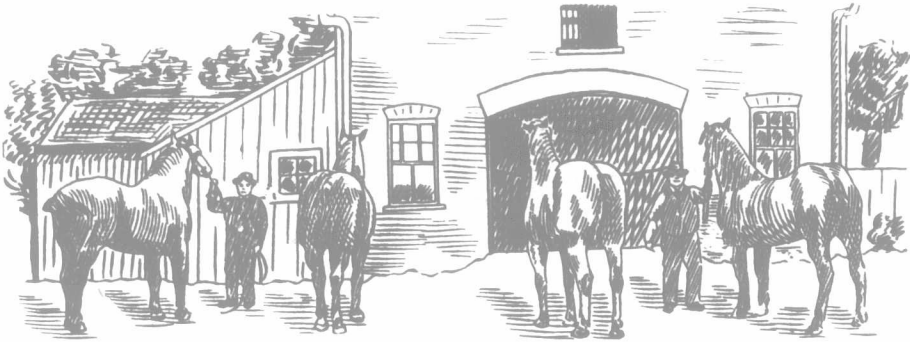
EVANS & SONS, Ltd., Montreal
Agents for Canada.

KINELLAR LODGE STOCK FARM
Clydesdales, Shorthorns, Cotswolds and Berkshires. Special offering at present of young stock. Cotswolds of all ages and Berkshire pigs. J. I. BALSDON, Box 64, Markham P. O. & Stn., Ont.

Advertise in the Advocate

22 PERCHERONS 22

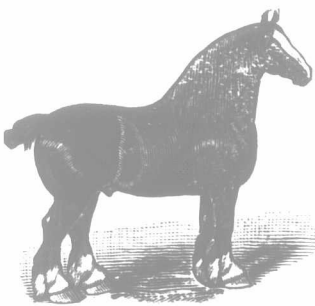
Have just arrived from France with an importation of 22 high-class Percherons, a number of which we intend exhibiting at Toronto and other Canadian shows, and will be pleased to show them to intending purchasers.



They are descendants of such noted horses as Brilliant, Besique and Romulus. We also have a few choice Hackneys and Clydesdales that are also for sale on easy terms. Visitors always welcome to our stables.

HAMILTON & HAWTHORNE, Props.
SIMCOE, ONT.

Smith & Richardson's CLYDESDALES



OUR NEW IMPORTATION of HIGH-CLASS CLYDESDALE STALLIONS and MARES, up-to-date in size and quality, will be on view at Ottawa Exhibition, Sept. 16-24, and afterwards at our own stables.

Address: Columbus, Ontario.

CLYDESDALES AND HACKNEYS

My new importation of Clydesdale stallions has arrived at Mitchell and is of the same high-class quality as usual, carefully selected from among the best studs in Scotland. My old customers and all lovers of a good Clyde are invited to see them. I have two Hackneys yet for sale, well worth the price put on them.

WM. COLQUHOUN, - Mitchell, Ontario.

QUESTIONS AND ANSWERS. Veterinary.

MARE WILL NOT CONCEIVE.

Twelve-year-old mare that raised a foal in 1902 and 1903; will not conceive this year, although she has been bred three times.

J. A. A.

Ans.—There are many conditions that prevent conception, and there are mares that will not breed three years in succession. It is possible the opening through the neck of the womb is closed. During the next period of oestrus, get your veterinarian to examine her, and if there is a closure, he will dilate the opening. Breed her in about an hour after the operation.

V.

INFECTIOUS OPHTHALMIA.

Three cows have each gone blind in one eye. The eye discharges a watery substance; the ball turns white, and the cow becomes blind.

F. C. C.

Ans.—This is infectious ophthalmia. Isolate all affected in a partially-darkened comfortable stable. Give each a laxative of one pound Epsom salts and one ounce ginger. Bathe the eyes well with warm water three times daily, and after bathing put a few drops of the following into each eye: Sulphate of zinc, seven grains; fluid-extract of belladonna, twenty drops; distilled water, one ounce. Whitewash the stable before introducing fresh stock.

ECZEMA.

Mare has lumps like the halves of small marbles on shoulders and sides. They are very itchy, and she scratches them and makes them run.

M. S. S.

Ans.—Purge her with eight drams aloes and two drams ginger. Follow up with one ounce Fowler's solution of arsenic night and morning for two weeks; then cease a week, and repeat, if necessary, etc. Give her body a good washing with strong, warm, soft soap suds; rub with cloths until dry. Then dress twice daily with corrosive sublimate, twenty grains to a quart of water.

V.

BLOODY MILK.

Heifer gives bloody milk from one teat, sometimes worse than others.

R. McV.

Ans.—This is due to a rupture of some of the vessels in the quarter. Some cows are congenitally weak in this respect, and while the trouble may be successfully treated, its recurrence cannot be prevented, while any cow may become affected from different causes, and not be liable to a recurrence. Bathe the quarter well several times daily with cold water. Do not milk quite dry. Give, internally, one ounce tincture of iron in a pint of cold water as a drench twice daily until blood ceases to flow.

V.

PARALYSIS—LAME COLT.

1. Cow took sick July 11th. She acted as though her head was sore; would hold nose out, and tears ran from her eyes. I applied turpentine to her head, and gave her raw oil, salts and sweet nitre. In three days she staggered and fell, and could not get up. I raised her with pulleys, and slung her for 24 hours; but she had no use of hind legs. I killed her in nine days.

2. Colt, three months old, is lame in fore foot; the hoof is smaller than its fellow. He has been lame for two months.

J. G.

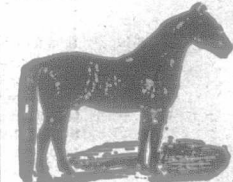
Essex Co.

Ans.—1. The cow had paralysis, due either to a congestion of the vessels of the spinal cord, or to a tumor on it, probably the latter. It is not probable any treatment would have effected a cure. Treatment should have consisted in giving a purgative of Epsom salts, and following up with two-drams doses of nux vomica three times daily.

2. It is probable the colt is lame from a ringbone, although no enlargement can be seen. Blister around the coronet once every month with one and a half drams each biniodide of mercury and cantharides, mixed with two ounces vaseline. Clip the hair off; rub well with blister; tie a cloth on so that he cannot bite it. In 24 hours rub well again, and in 24 hours longer wash off, and apply sweet oil. Oil every day now. Blister once every month, until lameness disappears.

V.

Horse Owners! Use GOMBAULT'S Caustic Balsam



A Safe, Speedy, and Painless Cure
The safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches of Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scur or blisters. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars.
The Lawrence-Williams Co., Toronto, Ont.

BAWDEN & McDONELL Exeter, Ont.



IMPORTERS OF
Clydesdale, Shire and Hackney Horses

Our new importation has arrived, and we have now about 30 stallions for sale, ages from 2 to 7 years; the best that could be purchased in Scotland and England.

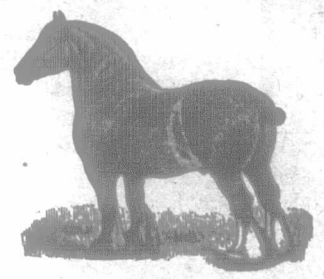
CAIRNBROGIE

CLYDESDALES

OUR NEW IMPORTATION includes the best stallions and fillies that we were able to secure in Scotland, and we were first on the ground this year to make our selections. Our object is not to import large numbers, but high-quality stock. We shall be pleased to show our horses to visitors at the big fairs. Don't fail to see them. om
GRAHAM BROS.,
Claremont, - Ontario.

FONTHILL STOCK FARM

50 SHIRE HORSES AND MARES to choose from.



MORRIS & WELLINGTON,

FRONTHILL, - ONTARIO.

"THE REPOSITORY"

WALTER HARLAND SMITH, Prop.



Cor. Simcoe and Nelson Sts., TORONTO.

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

Special Sales of Thoroughbred Stock conducted. Consignments solicited. Correspondence will receive prompt attention.

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

MANITOULIN SHORTHORNS
Edwin Beck, Gore Bay, Manitoulin Island. Breeder of SCOTCH and SCOTCH-TOPPED SHORTHORN CATTLE. A few choice animals.

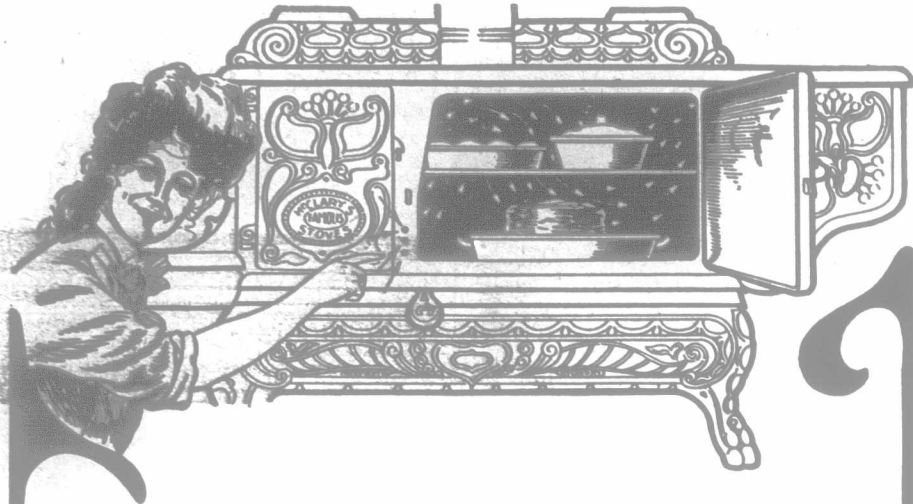
AYRSHIRES for sale, all ages. Some extra fine bulls, coming one year old, and heifers of all ages. Also my stock bull, Sir Donald of Elm Shade, just 3 years old.
DONALD CUMMING, Lancaster, Ont.

Shorthorns, Leicesters and Berkshires.
FOR SALE—1-yearling bull, bull and heifer calves; Berkshire boars and sows, ready for service, and suckers ready to wean. Write for wants, or come and see E. Jeffs & Son, Broad Head P. O., Bradford and Beeton Stns., G.T.R.



(2)
FREE HELP FOR MEN The only remedy known to science which will positively cure lost manhood is "RESTORINE," the marvellous German Remedy discovered by Dr. Jules Kohr. It is controlled in this country by the Dr. Kohr Medicine Company, a concern which has the highest standing in the medical world. This treatment has cured thousands of men, young and old, when the best known remedies have failed. If you are suffering from diseases of the generative organs such as lost manhood, exhausting drains, nervous debility, the results of abuse, this remedy can and will care you to stay cured. The headache, pimples, varicocele, pain in the back and falling memory, disappear completely in the worst cases in from one to two week's treatment. We make the honest offer of a cure or return your money. Thousands of testimonials. Correspondence treated strictly confidential. FIVE day's treatment sent free with a book of rules for health, diet and advice. Our greatest successes have been those who have failed with other treatments. This remedy is regularly used in the French and German armies, and the soldiers in these countries are models of strength and vitality. Write for sample sent securely sealed in plain wrapper.

Address DR. KOHR MEDICINE CO., P.O. Drawer 2341, Montreal.



Pandora Range

A Ventilating Oven that Ventilates.

There is only one practical way of ventilating a range oven, and that way has been adopted in the Pandora—is an actual, positive, working feature, and not a mere talking point.

Fresh air is drawn from the outside through small vents into the oven, while the odors and cooking fumes are forced by the fresh air out through small vents into the smoke flues, and up the chimney.

Puddings, cakes, bread, etc., cooked and baked in a "Pandora" oven are always light, fresh and entirely free from mixed odors and foreign flavors.

Ask your dealer to show you the Pandora Range or write to us for free catalogue before buying any other.

McClary's

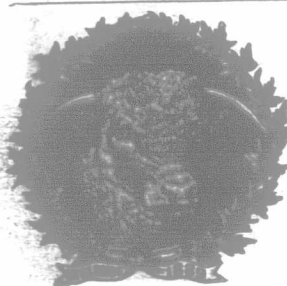
London, Toronto, Montreal, Winnipeg, Vancouver, St. John, N.B.

Hereford Bulls at Buyers' Own Prices

From Now to Sept. 1st.

Sireby imported bulls and out of imported or home-bred dams. A few heifers also on offer. We have six good things for the coming shows at prices that will make them go. om

W. H. HUNTER, The Maples P. O. Near Orangeville, Ont.



INGLESIDE HEREFORDS

Six Bulls, 8 to 12 Months. They are good ones.

A grand lot of yearling heifers, also 2-year heifers and young cows in calf, by the car lot or singly. Prices right, quality and breeding of the best. om

H. D. SMITH, COMPTON, QUE.

ABERDEEN-ANGUS.

Three bull calves for sale, out of Imp. Klondyke of the Burn, and females. om

WALTER HALL, Washington, Ont.

ELMHEDG SCOTCH SHORTHORNS. Stamfords, Minas, Nonpareils, Crimson Flowers, Marr Floras and Lavinias. Our herd will stand comparison with any. We reserve nothing: 45 head of both sexes, all ages, for sale. om James Bowes, Strathnairn P.O., Meaford Sta.

TO SECURE RESULTS
Advertise in the Advocate

IMPORTED SHORTHORNS and YORKSHIRES



Just arrived from England and Scotland, personally selected and apt-to-date in type and breeding, 16 Scotch Shorthorns and 17 large English Yorkshires, 7 superior young bulls fit to head first-class herds. Choice yearling in-pig sows, and young boars fit for service. Also home-bred stock. For particulars and prices, write om

M. J. DAVIS, WOODSTOCK, ONT.

MAPLE LODGE STOCK FARM, 1854

An offering of a very superior lot of Shorthorn Bulls and Heifers as well as something VERY attractive in Leicesters.

Choice ewes got by imported "Stanley" and bred to imported "Winchester." Excellent type and quality om A. W. SMITH, MAPLE LODGE, ONT.

FOR SALE

Stock Bull, Diamond Jubilee (imp.) 28861, (69583) A. H. B. 141460, bred by J. Marr, Cairn-brogie, Scotland, also 5 two-year-old heifers, 14 one-year-old heifers, 2 one-year-old bulls; 30 calves, male and female; calves and one-year-olds sired by Imp. Diamond Jubilee and two-year-olds bred to him. Fitzgerald Bros., Mount St. Louis P. O., Elmvalle Station, G. T. R. om

GOSSIP.

MORE CLYDESDALES FOR CANADA.

The Scottish Farmer of Aug. 20th says of all the men in the export horse trade few have the advantages of Messrs. Dalgety Bros., London, Ont., and Park Place, Dundee. The firm, having resident representatives here, is in touch with the principal breeders and owners, and gets to know exactly where the most reliable and best doing sires are located. It can keep its eye on a horse for a season or two, and discover to its own satisfaction whether he is a safe foal getter, and, before shipping three-year-olds, it has ways and means of finding out whether he settled his mares well during the season. Thus it has the advantage of the buyer, or buyers, who take a run here for, say, a fortnight at a time, and those who buy from the Messrs. Dalgety on the other side must reap a certain benefit. The horse-trade is, however, a rather uncertain one at best, and good doing horses can many a time be dropped upon by accident. On Saturday last the Messrs. Dalgety Bros. shipped per the S. S., Athenia, half a dozen of the best stallions that have left the country this year, and the splendid two-year-old filly, Belle of the Ball, by the Highland Society first-prize horse, Moncreiffe Marquis, out of Lady Bell, by that grand breeding horse, King of Kyle. This filly has won several prizes, and from her beautiful quality of bone, fine size, and grand feet and ankles, she is sure to develop into a high-class mare. The stallions, as we have said, are a specially good lot, mostly of great size, and full of the best blood. Amongst them is the great powerful horse, Sir Evelyn (10918), bred by the Seaham Harbour Stud, Ltd., and purchased at their auction sale when only a foal by Mr. Wm. Taylor, Park Mains, for 90 gs. He subsequently held the Fyvie premium, and his gets have always been noted for their great size and weight. He was got by Lord Stewart, out of the same mare as the champion, Prince Thomas, and in addition to being very big and weighty, he has grand feet and wearing bones. He has now been purchased from Mr. George A. Ferguson, Surradale, Elgin, and stallions of his weight and size will be sorely missed in our own country. Another remarkably good horse is the three-year-old, Wig-town Lifeguard, by the great Labori, out of a mare by Top Knot, winner of the Glasgow premium, etc. He was purchased from Mr. Peter Crawford, Dargavel, Dumfries, who reserved him for Messrs. Dalgety, owing to them being amongst his best customers. Blyth Ben (12054) is a two-year-old of a grand type, and is a get of the well-known Prince Gallant (6176), out of a Height of Splendour mare, bred in Bute. He himself was bred by Mr. George McGill, Bogside, Langbank, and was at one time the property of Mr. W. S. Park, Hatton. Asloun Darnley (12005) was purchased from Mr. James Leys, Asloun, Alford. He is rising four years, and his sire was the Sir Everard horse, Royal Charlie, and his dam was got by Fitz Gallant. The last of the lot, The Provost (11560), is a horse of splendid breeding and typical Clydesdale character, and was got by Sir Everard (5353), out of a Gallant Prince mare. Few shipments within recent years have surpassed this latest consignment, and the breeding and individual merits of the animals, male and female, are such as warrant their being well received on the other side, and doing themselves and the breed credit there. We trust they will reach their destination in safety.

TRADE TOPIC.

THE ONTARIO WIND ENGINE & PUMP COMPANY'S foreign trade is increasing, and they are now preparing for shipment for The Levant ten complete Canadian Airmotor outfits, fitted with special drainage pumps. They are also preparing shipment for Madras, India, of a Canadian Airmotor for supplying two houses with water on similar lines used in Canada here. Their English shipments are also being made constantly, and it is gratifying that Canadian goods are establishing themselves in distant parts of the globe.

Bad Circulation Cramps in the Legs

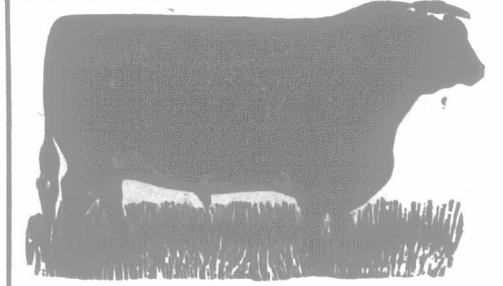
Symptoms of Kidney Derangements and Impure Blood—A License Commissioner's Praise for

DR. CHASE'S KIDNEY-LIVER PILLS.

Mr. William B. Best, license commissioner for the county of Haldimand, and who lives in Cayuga, Ont., writes: "I have been troubled with cramps in my legs. I would awake from sleep in keen distress. The pain would seize me at the ankle and work up the leg almost to the body."

"Believing this trouble to arise from kidney derangements and bad circulation of the blood, I bought some of Dr. Chase's Kidney-Liver Pills at W. J. Quinsey's store and began using them. They benefited me from the very first, and by continuing their use I have been completely cured. I would recommend Dr. Chase's Kidney-Liver Pills to any suffering as I did. I was so bad that I would have to jump out of bed two or three times during the night."

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 portrait and signature of Dr. A. W. Chase, the famous recipe-book author, are on every box.



30

First-class Shorthorn Heifers For Sale

9 imported heifers.
21 home-bred heifers.
These heifers are Scotch, many of them in calf.
Prices moderate. om

ARTHUR JOHNSTON, Greenwood, Ontario

SHORTHORNS

Some extra good young bulls for sale. Catalogue.

JOHN GLANVY, Manager. om

H. CARGILL & SON, OARGILL.

FINE GROVE SHORTHORNS.

High-class SCOTCH SHORTHORNS and SHROPSHIRE SHEEP.

Herd won 1st prize open to all ages, and for herd under 2 years, Dominion Exhibition, Toronto, '03, headed by imp. "Marquis of Zenda," bred by Marr; imp. "Village Champion," bred by Duthie; "Missie Champion," son of imp. "Missie 153rd," and "Clipper King," a Cruickshank Clipper. Imported and home-bred bulls and heifers for sale. om

W. C. EDWARDS & Co., Ltd., Proprietors. Jos. W. BARNETT, Mgr., Rockland, Ont., Can.

T. DOUGLAS & SONS, STRATHROY STATION & P. O., BREEDERS OF Shorthorns and Clydesdales

25 Shorthorns to select from. Present offering: 14 young bulls of splendid quality and servicable age, and cows and heifers of all ages. Also one (imp.) stallion and two brood mares. om Farm 1 mile north of town

JOHN GARDHOUSE & SONS Highfield P. O., Ont., Breeders of

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

A good selection of young stock of both sexes always on hand for sale. Scottish Prince (imp.), Vol. 49, at head of herd. Royal Albert (imp.) 20367, at head of stud. Farms 3 1/2 miles from Weston, G. T. R. and C. P. R., and electric cars from Toronto. om

Sunnyside Stock Farm. JAMES GIBB, Brooksdale, Ontario. Breeder of high-class SHORTHORN CATTLE (imp.) "Brave Ythan" at head of herd. Stock for sale. om

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

VALLEY HOME Scotch Shorthorns & Berkshire Swine

For sale: 7 young bulls of choice breeding, and a number of young cows and heifers; also a grand lot of young Berkshires of both sexes.

High-class Shorthorns—Two bulls ready for service. Also young cows and heifers of different ages, of the Lavinia and Louis families.

HOLLYMOUNT STOCK FARM. SCOTCH SHORTHORNS. Young stock, either sex, from imp. sire and dams, for sale.

Scotch and Scotch-Topped Shorthorns Present offerings, young stock, either sex. Sired by King of the Clarets.

SHORTHORNS Present offerings: Roan Robin 2875, a Watt bull; Prince Charlie 6412, a Russell bull.

Shorthorns, either sex; also Oxford rams, for sale. For price and particulars write to RICHARD WILKIN.

Shorthorns, Lincolns and Berkshires Young stock of either sex for sale. Reasonable. For particulars apply to W. H. Ford.

SHORTHORN CATTLE AND OXFORD DOWN SHEEP. Present offerings: Young stock, either sex.

CHAS. RANKIN, WYEBRIDGE, ONT. IMPORTER AND BREEDER OF SHORTHORN CATTLE AND OXFORD DOWN SHEEP.

SHORTHORNS AND YORKSHIRES Present offerings: Young stock, either sex. For price and description write to W. J. MITTON.

WILLOW BANK STOCK FARM Established 1855. SHORTHORNS AND LEICESTERS. Young stock, by Rosicrucian of Dalmeny (imp.) and Christopher (imp.); heifers bred to Scotland's Challenge (imp.).

SCOTCH SHORTHORNS Young stock, either sex, for sale, from Beauchamp (imp.) 32953 and Kinellar Stamp, a Golden Drop show bull, and from dams of rich breeding.

MY IMPORTATIONS OF SHORTHORNS AND SHROPSHIRE are now in quarantine and the sheep will be home on the 5th of August.

Queenston Heights Shorthorns FOR SALE. 2 strictly high-class bulls, fit to head any herd.

HUDSON USHER, Queenston, Ont. First-class Shorthorns—Young cows and heifers of fashionable breeding.

HIGH-CLASS SHORTHORN CATTLE AND OXFORD DOWN SHEEP Present offerings: Young stock, either sex. For price and particulars write to JAS. TOLTON & SON.

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HIGH-CLASS SHORTHORN CATTLE AND OXFORD DOWN SHEEP Present offerings: Young stock, either sex. For price and particulars write to JAS. TOLTON & SON.

W. G. PETTIT & SONS FREEMAN, ONT., Importers and Breeders of

Scotch Shorthorns

110 head in the herd, 40 imported and 70 pure Scotch breeding cows. Present offering: 3 imported and 6 pure Scotch from imported sire and dam; 6 Scotch-topped from imported sire and dam.

SHORTHORNS AND SHROPSHIRE. FOR SALE: Young bulls and heifers from best blood. Shearlings and lambs bred from imp. stock on side of sire and dam.

IMPORTED SHORTHORNS AND CLYDESDALES 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.

ALEX. ISAAC, Cobourg P. O. and Station SHORTHORNS, CLYDESDALES AND SHROPSHIRE FOR SALE.

Bulls and heifers of the most approved breeding and quality. Clyde Fillies, imported and Canadian-bred. Shearling and Ram Lambs, imported Mansell stock.

BARREN COW CURE makes any animal under 10 years old breed, or refund money. Given in feed twice a day.

WE HAVE FOR SALE. 7 Shorthorn Bulls of serviceable age and of present-day type.

R. MITCHELL & SONS, Nelson Ont., Burlington Jct. Sta. SHORTHORNS AND LEICESTERS

Am offering young bulls and heifers from imp. sires, and the dams of the best Scotch families. LEICESTERS

Choice yearling rams and yearling ewes, and this season's crop of lambs. Also a number of Berkshire pigs of both sexes ready to ship.

FLETCHER SHORTHORNS Our herd of breeding cows, both imported and home-bred, are of the most fashionable Scotch families.

SPRINGBURN STOCK FARM. North Williamsburg. H. J. WHITEKIRK & SON, PROPS.

AYRSHIRES FOR SALE. Four yearling bulls and 6 heifers, and spring calves of both sexes, all sired by Minto (10490).

TREDINNOK AYRSHIRES 4 imported bulls from the best milking strains in Scotland head the herd of 75 head.

Queenston Heights Shorthorns FOR SALE. 2 strictly high-class bulls, fit to head any herd.

HUDSON USHER, Queenston, Ont. First-class Shorthorns—Young cows and heifers of fashionable breeding.

HIGH-CLASS SHORTHORN CATTLE AND OXFORD DOWN SHEEP Present offerings: Young stock, either sex. For price and particulars write to JAS. TOLTON & SON.

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HIGH-CLASS SHORTHORN CATTLE AND OXFORD DOWN SHEEP Present offerings: Young stock, either sex. For price and particulars write to JAS. TOLTON & SON.

GOSSIP. GREEN GROVE SHORTHORNS.

This noted stock farm lies in Grey County, Ont., about 10 miles north-east of Markdale, C. P. R., and is the home of Mr. W. G. Milson, Goring P. O., a young man who is rapidly nearing the top in the ranks of Canadian Shorthorn breeders.

EJMHEDGE SHORTHORNS.

Elmhedge Stock Farm lies in the county of Grey, about 16 miles southwest of the town of Meaford, and is the property of Mr. James Bowes, whose post office is Strathairn, and whose fame as a breeder of high-class Scotch Shorthorns is pretty well known throughout the Dominion.

MELOTTE CREAM SEPARATORS

are easier to clean than any other. The thickly-enamelled surface of the bowl casing in sizes 1 to 5 is specially provided as being the easiest of all surfaces to clean.



Two-piece Spiral Skimmer. It should be noted also that the Melotte has neither a number of small tubes nor any long tubes, nor complicated device of any kind to be cleaned.

R. ALISTER & CO. LTD. 275 & 281 ST. PAUL STREET, MONTREAL.

Appointed Canadian Agents.

Having secured control of the old reliable McDougall's Sheep Dip and Cattle Wash, manufactured by Messrs. McDougall Bros., London, England, for Eastern Canada, our territory including the Provinces of Ontario, Quebec, New Brunswick, Nova Scotia, and Prince Edward Island, we will be in a position to supply this well-known Sheep Dip direct or through the trade at prices much below any such preparation at present in the market.

THE WORTHINGTON DRUG CO., Mfrs. Worthington's Canadian Stock Tonic, AGRICULTURAL CHEMISTS, Guelph, Ont.

AYRSHIRES AND YORKSHIRES

YORKSHIRE Boars and sows, four to eight weeks old, \$5.00 each at farm, \$1.00 extra crated and shipped.

YEARLING AYRSHIRE BULL, fit for service, \$65.00.

SEND FOR CATALOGUE TO

J. G. CLARK, Woodroffe D. and S. Farm, Ottawa.

HIGH-CLASS AYRSHIRE CATTLE For Sale: Both sexes; bulls and heifer calves from 2 to 9 months old; cows and heifers all ages.

FOR SALE Cook of North of St. Anne's 9997 1 yearling bull, 2 bull calves under 6 months, females any age.

SPRINGBROOK AYRSHIRES ARE ALL RIGHT 4 bull calves for sale, from 2 to 3 months old.

HOMECROFT Don't you want an Ayrshire bull fit for service now, or one for next year? Now is your time.

J. F. PARSONS & SONS, BARNSTON, QUE. AYRSHIRES From winners in the dairy test five years in succession.

DON'T WAIT BE UP-TO-DATE And buy some choice young Jerseys. Two bulls and a number of A No. 1 cows and heifers from great milkers.

W. W. EVERITT, Dun-edin Park Farm Box 552, Chatham, Ont.



Ogilvie's Ayrshires

Have competed with the best of the breed on the continent, and have won the aged herd 8 out of a possible of 9 times, besides a very large share of other honors.

Robert Hunter, Manager, Lachine Rapids, Que. Farm near Montreal. One mile from electric cars.

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

**FOR SALE:
HOLSTEIN
BULLS**

from 1 to 9 months, and
a few HEIFER CALVES

that are bred right, and feed right to obtain the highest development of dairy qualities—from GREAT SIRES and GRAND COWS. (All improved breeds have been made so by improved methods of breeding and feeding, and to attain progress the breeders must keep pushing.) We have every facility for breeding and developing stock at Annandale, and can sell YOU stock that will give you results. Write for just what you want, and do it now.

GEO. RICE,
Annandale Stock Farm, Tilsonburg, Ont.

Riverside Holsteins

30 head to select from. 8 young bulls from 6 to 10 months old, whose dams have official weekly records of from 17 to 21 lbs. butter; sired by Imp. Victor de Kol Pietertje, C. A. R. of M. No. 3, and Johanna Rue 4th Lad.

MATT. HUMPHREY & SON,
Haldimand Co., Caledonia P. O., Ont.

Holstein Bull Calves

Sired by Beryl Wayne Paul Concordia, whose sire's dam has an official record of 27 lbs. 14 oss. in 7 days. His sire's sire, De Kol 2nd's Paul De Kol, is sire of 33 cows with official records averaging over 20 lbs. each. Bull calves for sale.

BROWN BROS.,
Lyndale Stock Farm, LYN, ONT.

HOLSTEINS, TAMWORTHS, COTSWOLDS
Present offering: Bull calf, 8 mos., won 4 first prizes. Litter 3-months-old pigs, and younger ones; choice animals. Ram and ewe lambs and two shear rams; perfect covering. **E. O. BROWNE,**
Hilton, Ont., Brighton Sta., G. T. R.

THE CHAMPION HERD OF HOLSTEINS

In official lists, Maple Grove Herd stands first and champion for cow; 1st three-year-old, 1st two-year and under two-year-old. If you want bulls from such stock, address:

H. BOLLERT, Cassel, Ont.

JERSEYS

at the exhibitions. Our herd will be represented as usual at Toronto, London and Ottawa Fairs, and we invite all Jersey breeders and fanciers to inspect our stock. We have bulls and females of all ages for sale. Write for particulars to B. H. BULL & SON, Brampton, Ont. Phone 68.

LINDEN OXFORDS AND SHORTHORNS

Young stock of either sex, both imp. and home bred, for sale; also young cows due to calve in October, November and December. For particulars write to:

R. J. HINE, Dutton, Ont.

FARNHAM OXFORDS

We had the champion flock of Oxford in 1903. Importations annually. Animals of all ages and sexes, both imported and Canadian-bred, for sale at all times at reasonable prices.

HENRY ARKELL & SON,
ARKELL, ONTARIO.

**"MODEL FARM"
SHROPSHIRE**

Do you want an imported ram or a home-bred one to improve your flock? Our offerings will please you. 10 imported rams and many home-bred ones (from imported stock) to choose from—massive fellows, all wool and mutton and the type that pleases. Stock of all ages for sale. Prices consistent with quality. Long-distance phone No. 94.

W. S. CARPENTER, Prop., SIMCOE, ONT.

Dorset Horn Sheep

THE largest flock in America. The most celebrated prizewinners at the Columbian Exhibition and Canadian exhibitions. Contains more Royal winners than any other. Awarded 5 out of 8 first prizes at Toronto, London and Ottawa in 1900. Flock of 300. Stock for sale always on hand.

John A. McGillivray, Uxbridge, Ontario.

The Burford Flock of Shropshires won eleven prizes at the International. Choice yearlings and lambs, both sexes, by the famous Mansell ram, or lambs by Silver Medal ram at Toronto. 100 ewes bred to the above rams. LLOYD-JONES BROS., Burford, Ont.

Oak Lodge YORKSHIRES

are the recognized type of the ideal bacon hog, and are the profitable kind from a feeder's standpoint. A large number of pigs at different ages now on hand for sale. We can supply high-class exhibition stock. Write for prices.

J. E. BRETHOUR, BURFORD, ONT.

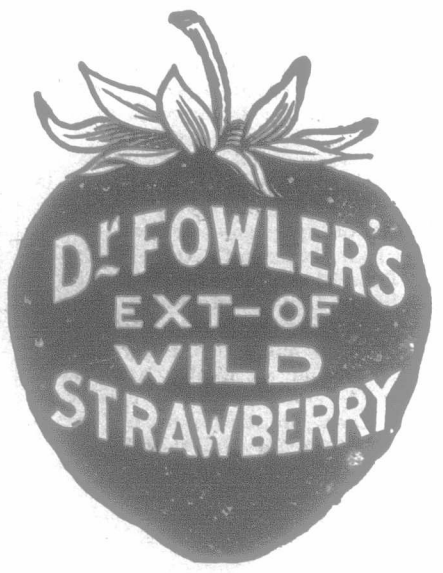
Hillcrest Herd of English Berkshires

IS UP-TO-DATE IN ITS METHODS.

WHEN WE PURCHASE we select the best from leading breeders, and WHEN WE SELL endeavor to give purchaser good value for the price, as well as giving him registered pedigree and guarantee to replace animals failing to prove breeders. Have now for sale a lot of growthy youngsters of good length with extra good bone.

JNO. LAHMER, Vine P. O., Ont.; Vine Station G. T. R., near Barrie.

**A Standard Remedy
Used in Thousands of Homes in
Canada for nearly Sixty Years
and has never yet failed
to give satisfaction.**



CURES
Diarrhoea, Dysentery, Cholera, Cholera Morbus, Cholera Infantum, Cramps, Colic, Sea Sickness and all Summer Complaints.

Its prompt use will prevent a great deal of unnecessary suffering and often save life.

Price, 55c.

American Leicester Breeders' ASSOCIATION.

A. W. Smith, Pres., Maple Lodge, Ont. Pedigrees now being received for Vol. 5. For information, blanks, etc., address:

A. J. TEMPLE, Sec., CAMERON, ILL., U. S. A.

Pennabank SHROPSHIRE and SHORTHORNS

A number of extra good and well-covered yearlings of both sexes, sired by imp. Rudyard ram. Also two extra nice young bulls. Prices reasonable.

HUGH PUGH, WHITEVALE, ONT.

Dorset Sheep

and Lambs, also Large Yorkshire pigs from imp. boars, for sale. Prices reasonable. For particulars write to:

ELMER BYMENT, Copetown P. O.

Oxford Down Sheep, Shorthorn Cattle Yorkshire Hogs.

Present offering: Lambs of either sex. For prices, etc., write to JOHN COUSINS & SONS, Buena Vista Farm, Harriston, Ont.

LEICESTER SHEEP FOR SALE

Lambs and yearlings, either sex. For description write to JAS. SMELL, Importer and Breeder of Clydesdales, Shorthorns, Leicesters and Berkshires, Hayne Barton Farm, Clinton, Ont.

MAPLE LODGE BERKSHIRES.

Having left Snelgrove and secured Maple Lodge Farm, Brampton, I am prepared to supply pigs of the best bacon type and breeding, with fresh blood added, and as large numbers as ever. Have a few good young boars ready for service and fine sows ready to breed. Spring pigs have come strong, and we can supply pairs not akin Address:

WILLIAM WILSON, Box 191, Brampton, Ont.

GOSSIP.

Messrs. F. Martindale & Son, York, Ont., write: We intend holding an auction sale of Shorthorns and Berkshires on October 26th, as we are overstocked. Our stock are in good thrifty condition, and are breeding regularly. Our young stock are exceptionally good, some sired by imported bulls, others by Bandoleer 40106, by Sirius, (imp.), and out of Red Bessie 2nd (imp.) Our herd has been noted prizewinners for many years. The Berkshires are a grand lot, numbering over thirty head; have young pigs by our stock boar, Benjafield's Royal Carlisle, bred at Biltmore, N. C., and descended direct from imported stock. The Lincoln rams we offer are growthy and of good type, and well-woolled.

FAITH IN YOUR STOCK.

The breeders of pure-bred stock who have faith in the merits of their stock and have the courage to invite buyers to come and inspect it and compare it in individual merit and pedigree with the stock of other breeders will win success. The way to show your faith in the merits of your stock is to advertise it, and you will inspire the confidence of the buyers if you advertise judiciously. Too small an advertisement invites cheap prices if seen at all, and too big advertising savors of plunging and fancy prices.

Ninety-nine out of every hundred live-stock breeders have the same object in view—to make money from the business, to produce a surplus which they hope to sell for enough more than cost to return them fair compensation for their labor, investment and risk and a reasonable profit besides. This is true whether the stock be pure-breds, grades or scrubs. But the situation of those who produce pure-bred breeding animals and those who raise the utility kind needed for meat or service is different—the latter depends upon market demands to bring him buyers, while the former, to succeed, must hunt or build up his market and this is best accomplished through publicity. It was so noted a breeder as Senator W. A. Harris who asserted that the chief value and credibility of a pedigree rested in the reputation of the animal's producer or owner. A breeder of pure-bred stock must obtain a reputation not only for reliability but for the production of good stock before he can hope to widen his market and enhance the value of his productions. How can he get this reputation?

First, be honest. Then get the stock, then—tell the people about it. If satisfied to remain a plodding mudsill, one of hundreds of thousands, keep still and let the public hunt you up. They may hear of you. If you want to reach out beyond your own neighborhood, build up and be somebody; you must let the public know that John Smith has confidence in John Smith and is not ashamed or too stingy to say so. Advertise your stock—not one week in a month or one month in a year; not in a measly, picayunish way, nor in a blowhard "spread," but in a steady, conservative, mean-what-I-say manner. John Wannamaker is America's prince of merchants and one of the world's greatest advertisers, and he frankly says that his business success is due to advertising. Here is what he says on the merits of advertising—and The Ruralist commends it to the careful reading of every stock breeder:

"To make a success of advertising, one must be prepared to stick to it like a barnacle on a boat's bottom. He should know before he begins it that he must spend money—lots of it. Somebody should tell him, also, that he cannot hope to reap results commensurate with his expenditure early in the game. Advertising doesn't jerk; it pulls. It begins very gently at first, but the pull is steady. It increases day by day, and year by year, until it exerts an irresistible power. It is likened to a team pulling a heavy load. A thousand spasmodic, jerky pulls will not budge the load; while one-half the power exerted in steady effort will start and keep it moving. There are three ways to make advertising pay, and these are the only ways. There are no others. First, is to keep at it; second, is to keep at it; third, is to keep at it."—[Live-stock Journal (American).]

Newcastle Herd of Tamworth Swine at Toronto Exhibition.

We have a choice lot of young stock, both sexes, on exhibition which will be for sale. Come early and make your purchase, as that is the spot to buy right where you can see what you want; and if you don't see it, ask for it. We shall also be prepared to book orders for younger stock left at home, and for fall litters arriving after the fair from our prizewinners.

COLWILL BROS., Newcastle, Ont.

TAMWORTHS AND HOLSTEINS

I would like to have my old customers, as well as new ones, to inspect my herd of Tamworths while at Toronto Exhibition. Will have a choice lot for sale, of both sexes. Also 4 Holstein bull calves, which are open for inspection at the farm.

BERTHAM HOSKIN,
Grafton Sta., G. T. R., The Gully P. O.

TAMWORTHS—DORSET HORN SHEEP.

Choice boars and sows of different ages at very reasonable prices. Also a few Dorset Horn rams from first-class stock.

JAMES DICKSON, Croton, Ont.
"Glenairn Farm."

TAMWORTHS

30 head from 2 to 5 mos. old, registered. Write for particulars and prices.

D. J. GIBSON, Newcastle, Ontario.

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.

MAPLE GROVE YORKSHIRES

Six May litters from show sows, five of them Toronto winners, pairs not akin. Also young sows in farrow. Dalmeny Cavalier (imported) and Maple Grove Vanguard at head of herd.

T. J. COLE, Box 188, Bowmanville, Ont.

YORKSHIRES

All ages, at reasonable prices. Also 1 Short-horn bull coming 3 years old, color roan, a sure stock-getter. Also Barred White and Buff Rocks, White Wandottes, Buff Leghorns, and Pekin ducks. Address:

A. GILMORE & SONS,
Huntingdon Co., Athelstan P. O., Que.

YORKSHIRES

Special while they last: Choice pigs from imported stock, 2 mos old, \$7 each; 3 mos. \$9. Pairs not akin. Registered, crated and free on board cars. Satisfaction guaranteed. Boars and sows all ages. Write your wants.

L. ROGERS,
Weston Station, O. P. R. and G. T. R., Emery P. O.

YORKSHIRES

for sale, from imported stock. For price and description write to

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

YORKSHIRES

for the fall trade. Imp. and Canadian-bred boars, ready for immediate service. Young sows for Sept. farrow; also spring pigs of the choicest breeding, imported and home-bred. 17 head imported this season.

Write to J. DAVIS, Woodstock, Ont., importer and Breeder of Yorkshires and Shorthorns.

Improved Yorkshires

Over three hundred for sale. The last three years our herd has won ninety per cent. of the first prizes 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. Prices reasonable.

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

CHESTER WHITE SWINE

Either sex, of the most approved type, for sale at reasonable prices. For particulars write to D. DECOURCY, Bornholm P. O., Mitchell Sta.

LARGE YORKSHIRES

GLENBURN HERD—upwards of 100 fine spring pigs, sired by imported Holywell Hewson. Also a few 6 month s'boars. Prices reasonable.

DAVID BARR, JR., RENFREW, ONT.

YORKSHIRES AND BERKSHIRES.

FOR SALE: Sows safe in pig and ready to breed. Boars 2 to 5 months old, of the long deep-sided type. At bargain prices if taken soon. Write C. & J. CARRUTHERS, Cobourg, Ont.

FOR SALE—Ohio Improved Chester Whites, the largest strain, oldest established registered herd in Canada; young sows in farrow; choice young pigs, six weeks to six months old; pairs not akin; express charges prepaid; pedigrees and safe delivery guaranteed. Address

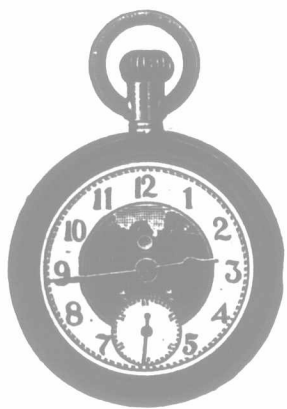
E. D. GEORGE, Putnam, Ont.

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

VALUABLE PREMIUMS Given to our present subscribers for securing New Subscriptions to the
FARMER'S ADVOCATE and HOME MAGAZINE

The Greatest Offer Ever Made by Any Paper in Canada

We must have honest workers. Changing the name from one member of the household to another, or deception of any kind, will not be allowed. If discovered, the premium will be withheld.
 Every premium we are giving can be relied upon as being strictly first-class. We positively will not send out cheap, trashy articles.



HALF SIZE

Lady's Watches

No. 1.—Sterling silver, open face, with genuine American jewelled movement, engraved, plain or engine-turned case, and stem winder. SIX NEW SUBSCRIBERS. Retail price, \$8.50.

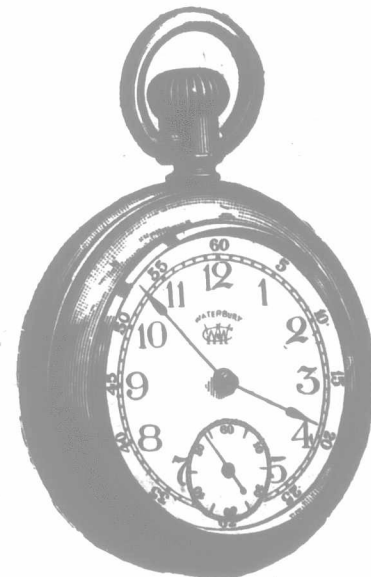
No. 2.—Gold-filled case, guaranteed for 15 years, with genuine American jewelled movement, very finely timed and stem wind. NINE NEW SUBSCRIBERS. Retail price, \$11.50



Gent's Watches

No. 3.—Nickel, open face, strong case, with thick glass and genuine American movement, with fancy dial. 3 NEW SUBSCRIBERS. Retail price, \$3.25.

No. 4.—Genuine Elgin or Waltham 7-jewelled nickel movement in 14-karat, twenty-year guaranteed, gold-filled, open-faced, screw back and bezel case. TEN NEW SUBSCRIBERS. Retail price, \$15.00.

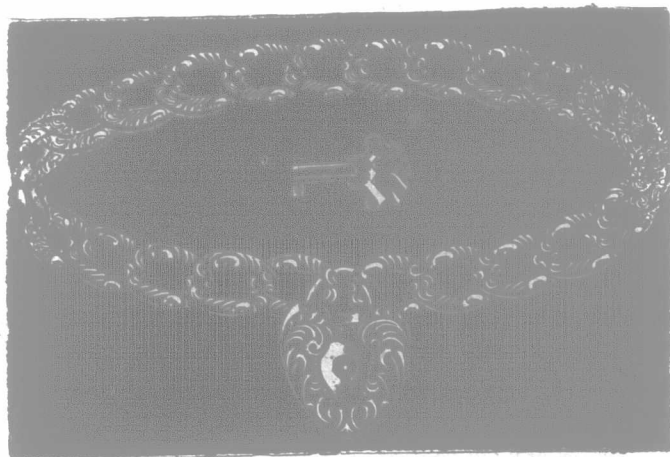


The subscription price of

**THE
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Is Only **\$1.50** Per Year

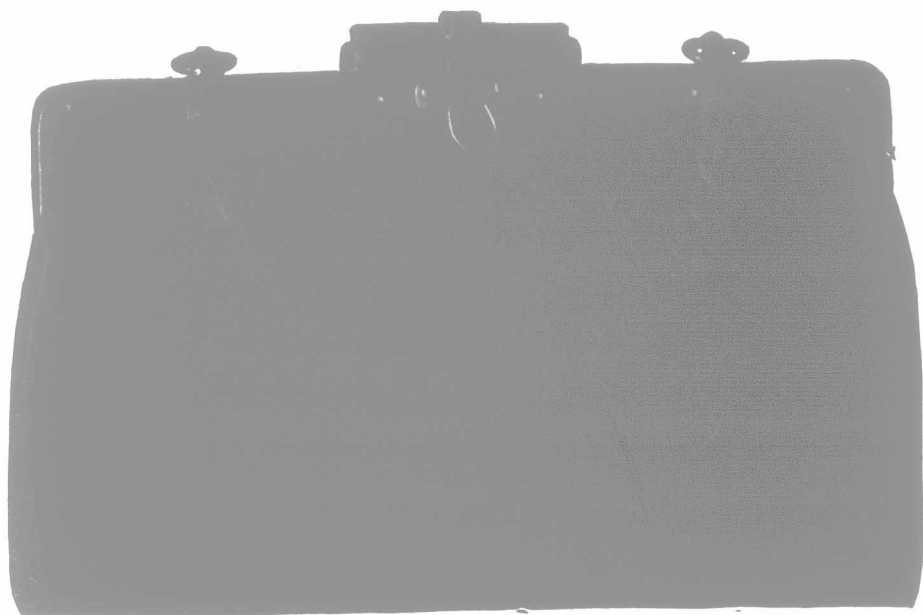
Cash must accompany all subscriptions. Premiums sent immediately upon receiving the new names.



Handsome Curb-link Sterling Silver Bracelet and Two Sterling Silver Friendship Hearts for Two New Subscribers

Remember, these premiums are given to our present subscribers for their trouble in getting up the club. The new subscriber is not entitled to any premium.

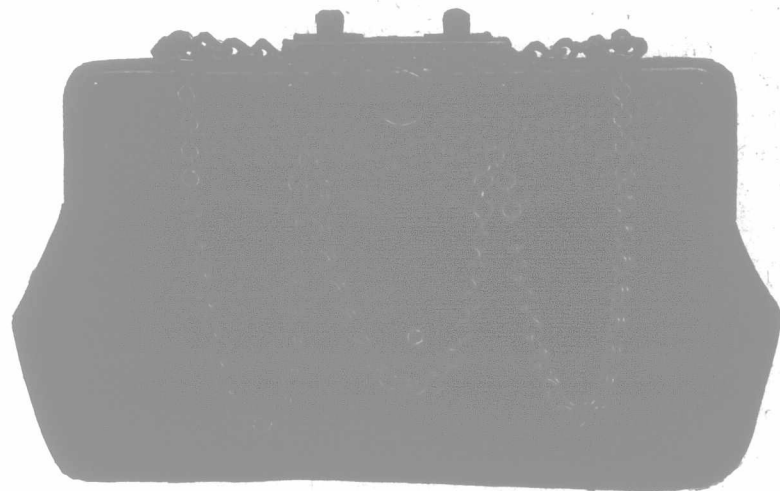
Every new subscriber to count in getting a premium must be a farmer (freeholder or tenant), not minors or employees.



Lady's Hand-bag

SIZE, 4½ x 7½ inches.

Just what every lady wants. A magnificent leather Hand-bag, leather-lined, leather handle, nickel-plated clasp, for TWO NEW SUBSCRIBERS. Retail price, \$1.50.



Lady's Wrist-bag

SIZE, 3½ x 6 inches.

This handsome pebbled-leather Wrist-bag, also leather-lined, nickel-plated clasp and chain, for ONE NEW SUBSCRIBER. Retail price, \$1.00.

THE WILLIAM WELD CO., LIMITED, - - London, Ont.

SEE OTHER SIDE.

BEATS ALL BARGAIN DAYS

Premiums given our Old Subscribers and Agents for securing New Subscribers to
The Farmer's Advocate and Home Magazine.

52 ISSUES IN THE YEAR.

Why take inferior Journals when you can get the Farmer's Advocate and Home Magazine,

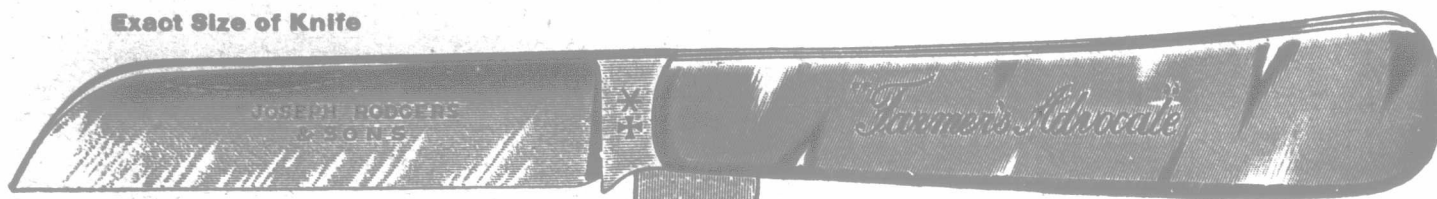
THE BEST AGRICULTURAL JOURNAL IN THE WORLD, FOR \$1.50

Your Choice of any two of the following articles (except Knife) for sending us one NEW Subscriber:

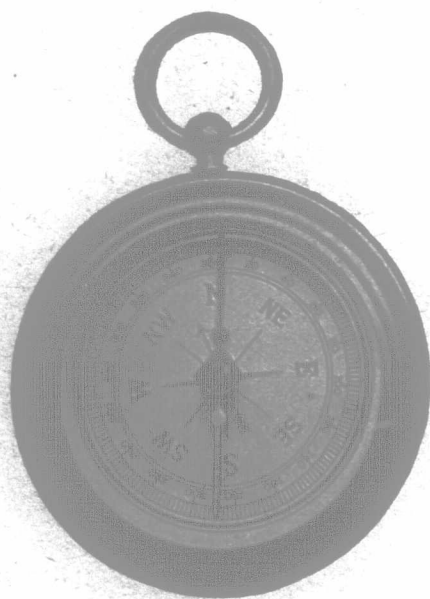
MICROSCOPE, READING GLASS, MARINER'S COMPASS, BRASS BAND HARMONICA.

No one of these articles can be purchased retail for less than from 50 to 75 cents each.

Exact Size of Knife



For one new Subscriber, an A 1 Farmer's Knife. Finest Steel Blades. Strong and Durable. Beautiful Nickel Handle. Manufactured by JOS. RODGERS & SONS, Sheffield, England. CANNOT BE DUPLICATED. Every Farmer and Farmer's Son should have one of these Knives. **Worth a Dollar.**



Mariner's Compass

(Two inches in diameter), Nickel Plated; Ring Attachment for convenient carrying. A useful article, and when you want it, you want it badly

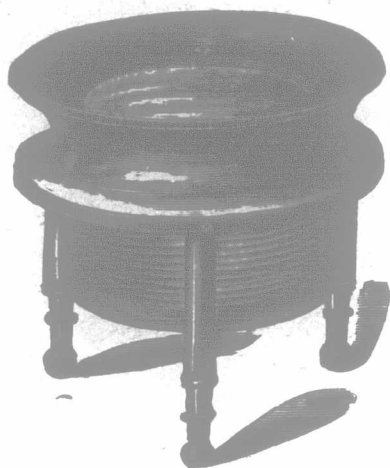


(Cut two-thirds size of Glass.)
Reading Glass, Powerful Lens, Nickel Mounted. Useful in every home.

The Microscope.

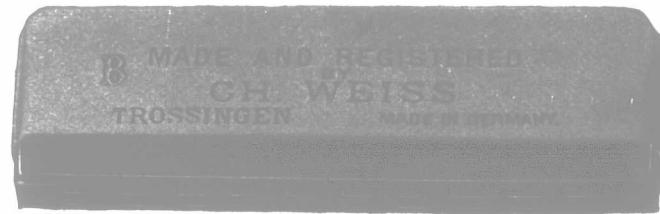
Tripod Microscope, with strong magnifying lens, useful for examining weed and other seeds, insects and other small objects.

Is a means of great entertainment and instruction in the home and out of doors.



The Brass Band Harmonica

Finest instrument in the World, extra full tone. Equal to a Silver Cornet. Every Boy and Girl should have one.



WHAT OUR SUBSCRIBERS SAY ABOUT THE FARMER'S ADVOCATE AND HOME MAGAZINE :

Would Not be Without for \$5.00 a Year.

Dear Sirs:—I would not be without the FARMER'S ADVOCATE AND HOME MAGAZINE for \$5 per year. GEO. A. DEWER, Kertch, Ont.

Dear Sirs:—I have been a subscriber to your valuable paper for the last four or five years and am well pleased with it. AND. GILCHRIST, Ceylon, Ont.

Gentlemen:—May say I like your paper very much, and would not like to be without it. It is No. 1. ALEXANDER KELLY, Wingham, Ont.

Gentlemen:—I went around the meetings and offered specimen copies of the FARMER'S ADVOCATE. All appeared to be subscribers already. I suppose this may be accounted for by the well-known fact that only the best farmers attend the Institute, and they are the readers of the farm papers. I am well pleased with its weekly publication, and find it very much improved. CHAS. SMITH, Port Nelson.

Gentlemen:—I have been a subscriber to your valuable magazine for the past thirteen years. It has been a welcome visitor semi-monthly and is still more so as a weekly. I am sending you two new subscribers with my own renewal for 1904. Trust your subscription list will be greatly enlarged. W. L. DAVIDSON, Bethel, Ont.

Gentlemen:—I am very much satisfied with your paper, and find it a great help to a farmer. N. L. MARSHALL, Binbrook, Ont.

Gentlemen:—I believe the FARMER'S ADVOCATE is unexcelled in every department, and a great boon to every farmer in Canada who receives it. REV. W. W. CONRAD, West New Annan, N. S.

Dear Sirs:—I enclose herewith my subscription, \$1.50, to your splendid magazine. It seems to be improving in every department. I find more instructions in the weekly than I have time to follow up, but will wish you every success in your work of distributing information through the country. MARSHALL J. HUNT, Carlisle, Ont.

START TO-DAY AND GET THE NEW SUBSCRIBERS

THE WILLIAM WELD CO., Limited, London, Ontario.

SEE OTHER SIDE.