

**PAGES
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EDITORIAL

THE EDUCATION OF THE RANK AND FILE.

Over the civilized world there has been for many years a disturbingly large drift of population from the farms to the populous centers. It has been the subject of much comment in Canada, United States, Britain, Germany, and other countries. While the farms cry out for labor, vast masses horde in city slums, ignorant, hungry, destitute, and about as miserable as human beings can be and yet exist. In the greatest cities this poverty and congestion is the worst. It is not confined to the Old World, for New York, Chicago, and even more modest-sized cities, such as Montreal and Toronto, have their awful slum districts, festering abscesses in the civic life, producing a prolific crop of immorality and vice.

For this worse-than-bestial condition, one remedy is commonly prescribed. "Back to the land," say the social reformers. "Back to the land" is the motto and effort of that great evangelizing body, the Salvation Army. "Back to the land" is indeed the remedy—or would be, were it practicable. But for the most part it is not. It is an eloquent commentary on the nobility and nature of agriculture, that as man descends into the depths of ignorance, poverty and moral degradation, he develops a pronounced aversion to the farm and rural life. As a rule, it is men of broad outlook, sane views, pure minds and noble sentiments who hold country life in the highest esteem. The habits of the slums shun the farm as they would a plague, and if by chance induced to make the experiment, quickly forsake it for their old haunts and ways. Not for them is the pure fresh air and arching sky, the springing vegetation, the exquisite notes and tints of nature's creatures of the earth and air, the placid kine, the perennial wonders of stable and field; the honest, thrifty toil in co-operation with nature, the quiet meditation of the Infinite. Back to their squalid, grovelling existence in the slum; there is the life they know and can appreciate—the congeniality of others similarly depraved, the activity of a seething tide of spent humanity. It is excitement, it is the life they crave.

Since little can be done to uplift these submerged classes, the remedy must lie in prevention. Prevention concerns itself with causes. What are the causes of this morbid inclination for the city, which to so many eventually means the slum? They are twofold in character—economic and sociological. The economic phases are easily traced. Mankind, in advancing from the primitive state of individual support and independence, requires an increasing multiplicity of implements, contrivances and manufactured goods of all kinds. These are most advantageously produced in compact communities. As the race's productive capacity and wants increase, a gradually diminishing proportion of people are able to produce the products of the soil, while the rest assemble in cities to engage in manufacture and trade. This is inevitable, and in so far as necessary, is not to be prevented, though it may occasion legitimate concern.

The sociological causes are more complex, and need not be inquired into exhaustively for the present purpose. Suffice to say, man is a gregarious or sociable creature. He likes companionship and the conveniences which city life affords. Also, he likes short hours—much time for amusement and entertainment. The old-time mental picture of unending toil, which he commonly associates with farm life, is a powerful deter-

rent to the indigent, the slothful and the faint-hearted. On the other hand, ambition has lured many to the town—the ambition to marshal vast forces, to acquire wealth rapidly, to loom large and prominent in the eyes of men. Vanity is a predominant trait of the human race. In short, farm life has, throughout the nineteenth century, made its strongest appeal only to the stalwart, industrious, thrifty, philosophical elements of mankind. As the proportion of these is small, it follows that a great many of those who have continued on the land remained partly, at least, through sufferance, not being fitted for other walks of life. That far-off fields look greener than they are is proverbially acknowledged, and when with the lure of distance is combined the exaggeration of envy, the tendency to dissatisfaction with one's lot becomes doubly strong. When to this is added many forms of economic injustice, such as result from high protective tariffs, bonuses and tolls, direct and indirect, is it any wonder that the prevailing spirit throughout the agricultural world has been one of disparagement and discontent, and a longing for other means of livelihood? Is it surprising that agriculture has not, generally speaking, been prosecuted with that enterprise, that enthusiasm, that interest necessary to its advancement in pace with other industries? Is it strange that the farmer, handicapped by the conservative influence of isolation, should lag behind in the race? Is it inexplicable that his children should imbibe his discontent, or fail to be inoculated with the germs of his too scanty enthusiasm? Is it any wonder that they should incline to forsake an occupation in which their father felt so little interest, and of which they saw so few examples of broad-gauge success? No wonder at all. Not one in ten thousand ever learned to appreciate farm life or to estimate the occupation at par value. The universal tendency has been to discount, discredit and disparage.

One might have thought the schools would do something to correct such abnormal and irrational impulses. Not so; instead of correcting, the school aggravated the cityward impulse, and as education became general, its effects in this direction were more pronounced. The whole curriculum and tendency of the school was to extol the achievements of militarism, as revealed in the pages of history, of scholarship, of pedantry; then, later, of professional employment, and finally of mercantile and industrial enterprise. Dealing as it did with books and book-lore, developing only the mind and never the muscle, dissociating the student throughout the impressionable years of his schooldays from manual employment, the effect was bound to be a centering of ambition on those realms of effort peculiar to the town, a distaste for work, and a preference for sedentary occupation, or, as a Westerner once put it, "a preference for a white-shirt job." As the schools and colleges were of a nature calculated to produce professional, clerical and business men, rather than artisans and farmers, the pervading spirit of discontent above referred to welcomed the school as an avenue of escape from labor; hence the schools, colleges and universities have been turning out an overplus of professional and mercantile classes, while the ranks of farmers and artisans have been to a large extent recruited from those who had not the spirit, energy, mental equipment or the opportunity to escape therefrom. Hence the continual demand for immigrants from less enlightened countries to reinforce the ranks of the agricultural and industrial army. Particularly the agricultural army; for, broadly stated, the tendency of the schools, in its ultimate working out, has been to develop an aversion to manual labor, but an especial aversion to the life and occupation of the farm.

What is to be done about it? Withhold education from the masses? Scarcely. The ideal of free education for all the people is right and proper; it is a noble and exalted aim, but educationists now recognize that a system of schools designed for the whole population of the state must not be the same as one intended only for the education of a limited class of rulers, aristocracy and professional men. While we require in the schools a broad basis of general information and some attempt at culture, we still more emphatically require to inculcate a universal belief and feeling in the dignity of physical labor; we need to arouse the interest of children in the things about them, and particularly in their prospective callings in life, to the end that the manifold talents of the human family may be developed each along the line of his particular bent. Then the boy with a genius for mechanics will become a mechanic, and a good mechanic; the boy with an inclination for the farm will become a farmer, and a good farmer; while those with special aptitude for law, medicine, or letters, will become lawyers, doctors, and literary men. Heretofore, our unbalanced educational systems have tended to cramp the manual and agricultural activities of the individual, and to allow him freedom to develop only along the lines of sedentary employment. In fact, by its unintentional but nevertheless actual and systematic warping of the inclinations and aptitudes of our people, the educational systems have imposed on the race a disability like unto that imposed on the physique of a Chinese woman by the bandaging of her feet.

All this must be changed. We must balance up our public-school curricula by the general introduction of manual training, domestic science, school-gardening, nature study, and by an earnest, capable and persevering effort on the part of the teacher to relate these subjects to the rest of the curriculum, and to weave into the whole course in every possible way all that we can to arouse a wholesome, practical interest in the household, the workshop, and the farm—particularly the farm, for the adverse influences of the past have affected it most seriously, and all admit that a large, intelligent, progressive agricultural population is the best and greatest asset of the state.

INCREASING INTEREST IN DRAINAGE.

As most of our readers must be aware, from repeated annual announcements, the Department of Physics at the O. A. C., Guelph, Ont., in charge of Wm. H. Day, is authorized by the Provincial Department of Agriculture to send men out to farmers in the Province, on application, to survey and plan farm-drainage systems, the only charge being the expenses of the surveyor from Guelph and back, which are not very heavy, seeing that he travels for one cent a mile each way.

An increasing number of farmers seem to be taking advantage of this very liberal offer. In a recent communication from Mr. Day, he informs us that they have three men in the field practically all the time, on survey work, and one man in the office drafting. Each field man attends to practically two applications per week, each application generally affecting several farms. An application is made the occasion of a field demonstration of methods of locating course of drains, finding levels, working out grades, size of tile, a discussion of drainage in general, and of the problem under consideration in particular. These meetings are attended by neighbors interested in the subject, numbering sometimes as many as forty or fifty. Thus is the good seed scattered, and thus is it taking root.

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

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THE LONG AND SHORT OF IT.

It simmers down to this: If we milk a cow at all, she must, to be profitable, yield liberally. Whether dairy-bred, scrub or dual-purpose, the three and four-thousand-pound milch cow is a poor money-maker, and he who milks such a one must be content to work for small wages. When we advocate dual-purpose cows, we should always be understood as meaning cows that are capable of yielding six to twelve thousand pounds of milk a year—cows like the first-prize Dairy Shorthorn at the Royal, illustrated in our July 30th issue, cows of the class represented by the exceptional eleven-year-old Shorthorn, Darlington Cransford 5th, that outclassed all competing breeds at the Royal Show, at Newcastle, a few weeks ago, with a milk yield, made 83 days after calving, of 78.12 pounds in 24 hours, testing 4 per cent. butter-fat, and a butter yield of 3 pounds 1 ounce; cows such as the splendid type of Shorthorn grades that used to be the pride of our stables and pastures. Cows of this kind are very scarce now, thanks to the folly of the Shorthorn breeders, who neglected milking quality in a concentrated ambition for perfection of beef type.

In the absence, or rather in view of the extreme scarcity, of such cows at present in Canada, and the still greater rarity of Shorthorn bulls calculated to perpetuate in their heifer get what insufficient milking quality the dams possess, shrewd farmers have forsaken the old breed of their choice, and wisely gone in for the special-purpose dairy breeds. Of course, there may be a limited number so situated that they can afford to cut the milking out entirely, and allow the calves to suck the cows. Such a system, however, yields a meager return per acre of land. Those who follow it must be in a region of very cheap land rents, or at least contiguous to large areas of cheap pasture. The worst of it is that the system tends to cheapen, rather than to enhance, the value of land, and to depopulate, rather than set-

tle, the district in which it is generally pursued. It would be a setback for Canadian agriculture, and a hardship to consumers of beef, were such a system ever to become extensively adopted. The rank and file of farmers, will be wise to insist on keeping cows that milk abundantly. If one or the other had to be given up entirely, we could far better dispense with the beef than the dairy breeds. In fact, we have not much need in Eastern Canada for a special-purpose beef breed at all. We need special-purpose dairy breeds, and a dual-purpose breed—a real dual-purpose breed—not a beef breed called dual-purpose by courtesy.

The benefit with which the newly-inaugurated standing-field-crop competitions are fraught is indicated by the official statement that the annual value of the field crops in Province of Ontario is upwards of \$140,000,000. According to this computation, an increase in yield of one per cent. would mean an increase in output of \$1,400,000, or nearly twice the amount of the total Provincial appropriation for agriculture in the year 1908.

HORSES.

INTERNAL STRUCTURE OF THE HOOF OF HORSES.

[From Professor Wortley Axe's book, "The Horse in Health and Disease."]

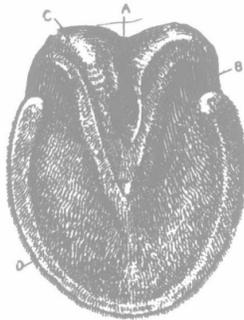
Although the hoof is a firm, strong, protecting covering to the sensitive foot within it, very serious injury to the horse results from defects in its structure, which are often overlooked. These will be appreciated more readily when it is known that within the hoof is a particularly delicate and complex arrangement. When a hoof is removed with care, a beautiful, sensitive structure is exposed,

with nerves and blood vessels. Just where the hair meets the horn—the part called by horsemen the coronet—is a very important structure, seen when the hoof is detached. This is a prominent ring or band, extending round the foot, and covered with very large papillæ. From it the wall grows, and injuries to it are followed by serious defects in the horn. Not only do such easily-recognized conditions as "sand crack" and "false quarter" follow injuries to the coronet, but all the defective qualities of horn, such as are found in dry, brittle hoofs, proceed from the coronet. So, also, do the rings and irregularities often noticed on the front of the hoof.

Growth of Hoof.—The wall grows downward from the coronet at the rate of about an inch in three months. It is constantly growing, and, when protected from wear by a shoe, soon causes a disproportionate hoof. If allowed to grow, it may even produce deformity. Remembering this, horse-owners will understand how necessary it is that no shoes should be worn more than about a month without the superfluous growth of horn being removed from the hoof. Farm horses, in idle seasons, are often grossly neglected by being forced to stand in shoes attached to hoofs so overgrown as to place the foot quite out of its proper relative position to the limb.

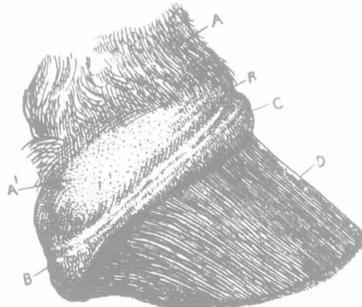
Young horses that have never been shod are often injured by being allowed to run in yards or small soft pastures where the hoof is not naturally worn down. Their feet become so overgrown and disproportionate that the limbs are injured and joints twisted permanently. Even foals should be attended to by the farrier when their hoofs become overgrown. No paring is necessary. All that is wanted is the removal of the excess of wall with a rasp. This necessary attention would frequently make all the difference between good feet and limbs, and bad ones.

Cartilage.—It is unnecessary to enter more into detail as to the anatomy of the foot. Within the sensitive layer just noticed are the bones, and attached to them the tendons which move the limb in progression. There are two structures,



The Sensitive Foot: Sole and Frog.

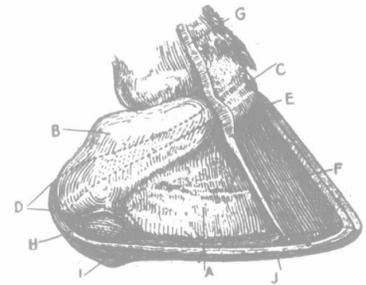
A, median cleft of fleshy frog; B, laminae of the bars; C, velvety tissue of the frog; D, velvety tissue of the sole.



The Sensitive Foot: Side View.

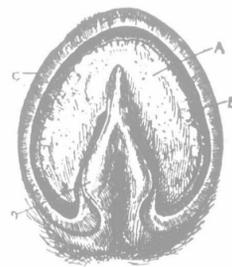
A, skin; A', skin devoid of hairs; B, peripole band; C, coronary cushion; D, sensitive laminae.

having a contour exactly matching the inner surface of the hoof. The inner surface of the wall is covered with rows of thin, horny plates running from above downwards, parallel to each other, all sloping forwards, like the fibers of the wall. The corresponding portion of the sensitive foot presents hundreds of similar parallel projecting leaves of soft, velvety, fibrous tissue. These are called the sensitive laminae, and in the living foot are dovetailed between the horny laminae of the wall, so as to afford a firm, secure attachment between the two. The sensitive frog and sole are firmly attached to the corresponding horny parts; but instead of plates, the connecting medium here is a mass of little papillæ, so closely arranged as to give a velvety appearance and feel to the exposed surface. This sensitive layer, known to farriers as "the quick," is boundedly supplied



Lateral Cartilages, etc., of the Foot.

A, os pedis; B, lateral cartilage; C, peripole; D, peripole band; E, coronary cushion; F, sensitive laminae, or fleshy leaves; G, section of skin; H, fleshy frog; I, horny frog; J, horny sole.



Under Surface of the Coffin Bone, showing its Position within the Hoof.

A, os pedis; B, sensitive and insensitive laminae; C, wall of hoof; D, horny frog.

however, which must be mentioned. The chief bone of the foot—the coffin bone—which gives the general form to the hoof, does not extend throughout its whole interior. It forms the basis of the front and sides of the hoof, but towards the heels is replaced on each side by plates of gristle or cartilage. This elastic material can be felt at the inner and outer sides of the coronet through the skin of the living horse. When diseased and converted into bone it forms the so-called side-bones, which sometimes cause lameness, and always destroy the natural elasticity of the foot. These cartilages, replacing bone at the back parts of the foot, give resiliency to the hoof, and so prevent concussion.

The Frog.—If we examine the under surface of the foot, we find another provision against jar, for, whilst the sole rests upon a bony basis, the

AUGUST 6, 1908

THE FARMER'S ADVOCATE.

frog does not. The body of the coffin bone only extends backwards to about an inch past the point of the frog. It there divides into two processes which extend nearly to the heels, but leaving between them a large space which is filled by a pad of elastic material, over which the frog rests. This arrangement permits the frog great freedom of movement, and gives to the back portion of the hoof the special feature of elasticity so necessary to its function of breaking concussion when the foot comes to the ground during progression. The front part of the foot, by the thickness and hardness of the wall, and by the rigid basis of bone within, is specially fitted to sustain the strain which is placed upon it when the toe takes the weight of the horse, as it does in all forward movements. The back part of the foot, by its thinner and more elastic horn, by its prominent and soft frog, and by the partial substitution of cartilage for bone as its inner basis, is specially endowed for receiving its first impact with the ground during progression. That the foot may preserve its functions intact, the hoof must be maintained in its best form. No parts must be defective, and all must be proportionate. A foot denuded of horn may have its sensitive portions injured, and a foot covered by an excessive or disproportionate hoof may so destroy the balance of the limb as to cause grave lesions, resulting in lameness.

THE IMPROVED HACKNEY.

The present fashionable Hackney horse, through many generations of purity, has been stamped with various good and desirable qualities, not the least of which is his unparalleled action, writes W. R. Gilbert, in *Rider and Driver*. Since the early shows held by the Hackney Society, there can be no doubt that great permanent improvement has been made in the general style and symmetry of the Hackney; but I specially refer to the improvement in action. There are various styles and classes of action, but they all involve more or less lofty knee movement. Breeders find it very difficult to produce hock action relatively as lofty or as good as the well-established knee action; hence, a fore foot lifted a great height in a trot, has not time to reach the ground at exactly the same period as the hind foot comes down, this want of cadence being fatal to the horse for riding purposes.

Nothing is more uncomfortable than the double bump experienced and endured by a struggling rider on a horse with a lofty knee action. The rider first bumps the saddle exactly at the moment when the horse's hind foot reaches the ground, and he bumps again the moment after when the fore foot comes to the ground. However perfect the horse in mouth and manners, this double bump is absolutely fatal for riding purposes. Better ride a low-actioned Thoroughbred or breezy saddle horse, which kicks the same stone all the way home, than a horse that almost knocks his teeth out with his knee.

It is impossible to avoid the above uncomfortable ride, as the nervous energy, transferred to such muscular energy in the loins and quarters of the horse as swing the hind leg, and lift up the rider, are out of tune and time with the much admired shoulder action.

Just as Hackneys are improving and advancing in their action, so they are becoming less suitable for riding purposes. It is therefore extremely inadvisable for Hackney admirers to describe these high-steppers as saddle horses. They are being bred further away from saddle work, and the greater the distance from the pigskin, the greater their value for the park phaeton or other light and fashionable carriage.

If the rider springs him into a canter, there is still the uncomfortable and undesirable struggle of the shoulder; hence, with scarcely an exception, the Hackney should stick to harness as closely as the cobbler to his last. The more action, the higher price; but even should any show produce one or two solitary Hackneys to compete in the new classes for high-school riding, let not judges and junior breeders thereby be influenced.

There has ever been a market for the harness stepper, and that market seems likely to improve with the modern carriage, which is made smaller and lighter than formerly. The various influences in this direction are as follows: The great improvement in roads, and especially the adoption in cities and towns of asphalt, has removed the necessity for such great strength in carriages as was required formerly; in fact, ever since the introduction of coaching, the various vehicles have gradually become lighter, in consequence of road improvements. Another point is that certain city jobmasters find that a smaller horse answers their purpose better, and they now buy 15.3 to 16 hands, instead of 16 hands to 16.2.

Some of those who combine their jobbing business with the carriage-trade, further state that there is a better demand for the smaller horse, as the private buyer has well-grounded suspicions of softness and unsoundness in oversized horses. One cannot have size without sacrifice, and if roaring and other unsoundness, together with dropsical legs and doubtful feet, are the ac-

companiments of size, those private buyers and hirers who prefer a 15.3 horse are wise in their generation.

Without the increase of size (which I have so frequently advocated upon certain lines), the present pure-bred Hackney can meet these small and light carriage requirements; and, with rapidly-growing large centers of population, together with a foreign demand, there will, in the future, be required a vastly increasing number of harness steppers.

No doubt some readers may mentally ask, What about the motors? Well, for business purposes the motor has come to stay, as many calls can be made in a short time; but even this necessitates a considerable country-like distance between calls. The fashionable suburban doctor or the important wholesale traveller may require a motor, but the lady of the parks will ever prefer her victoria and pair; and if the lady, then, of course, the gentleman.

But all this will not in any way interfere with the carriage stepper, whose position is not to be interfered with. Therefore, let Hackney breeders persevere in their journey from the simple to the complex—from modest mediocrity to superlative extravagance and superiority in action, balance and address. Encourage smartness and intelligence of countenance in harness horses—a point once much neglected—encourage constitution, insist on good limbs (I need not mention soundness, as the Hackney is a sound breed), and, above all, encourage good all-round action. That alone suits the fashionable carriage, and for which high prices are freely given.

GOVERNMENT ENTERPRISE IN HORSE BREEDING.

Government enterprise in America is tackling all kinds of stunts in the way of breed-making. The United States Department of Agriculture is co-operating at present in three distinct lines of breed evolution. Out in Colorado, the State resources are being supplemented by Federal aid in the attempt to establish an American breed of carriage horses, using the trotter as foundation stock. In New England the Washington Government is co-operating with the Vermont Experiment Station to rejuvenate the Morgan; while not to

juring with the equine race, it must not be inferred that Canada is behind the band waggon. The Dominion Department of Agriculture has been lending its good offices in a re-inspection of foundation stock for the French-Canadian Horse Studbook, which is one of the registers kept by the National Records at Ottawa, and if anticipations are realized, Canada will soon have a distinctive breed of native horses of well concentrated blood lines, and a really high degree of equine merit. In fact, these horses are already acknowledged as being for all practical purposes pure-bred, the first move to establish a record having been commenced in 1885. Later the Province was visited by inspectors, with a view to making a first selection of animals for the records. Last year, Hon. Sydney Fisher, Dominion Minister of Agriculture, proposed the new selection, which has since been made. Thus this distinctively Canadian breed, preserving and systematically perpetuating what blood lines remain of the celebrated old French-Canadian pony, lays claim to a considerable measure of national interest and pride, and it is considered by some that the Canadian experiment in breed evolution is not unlikely to prove the most successful of the four.

PREMIUM PICTURE OF BARON'S PRIDE.

A splendid photo-engraving of the celebrated Clydesdale stallion, Baron's Pride, may be obtained by any present subscriber of "The Farmer's Advocate" who will send us the name of one new yearly subscriber, accompanied by \$1.50. The engraving is 7½ x 11 inches in size, and is printed with a soft tone, combined with much clearness of detail, on a card of finest coated stock. It is a beautiful picture to frame and hang in the library or sitting-room of any horseman's home. Copies may be purchased from "The Farmer's Advocate" at 50 cents each.

LIVE STOCK.

JUDGING LIVE STOCK.

Having carefully considered the general principles of stock-judging, and being confident that from experience and observation he has an intelligent conception of these, which may be tersely classed under the heads

breed type, quality, conformation, fitness for a purpose, and indications of constitutional vigor, the person accepting the position of judge will do well to first take a general view from all sides of the entries brought before him for placing, then select a "short list," of such as to his mind may possibly come into the prize-list, leaving the clearly impossible ones to one side; or, perhaps better, if the number is limited, place all in order of merit. A careful individual examination in all important points should next be made, and in case of doubt as to the claims to preference of any two or more, bring them together for closer examination, noting and allowing value for merit in breed character, handling quality of skin, hair or fleece, and flesh, symmetry of conformation, soundness and proper plac-



Dissenter (7044).

Hackney stallion; chestnut; foaled 1898; sire Connaught (1458). Winner at Dublin Show, 1908.

be outdone, the Iowa State College besought Federal countenance, and, if we mistake not, financial support, in the ambitious attempt to develop a new breed of draft horse, to be known as the Amgrey, and produced by a blending of the blood of gray Clydesdales and Shires, with a dash of Percheron to be probably introduced. Of course it remains to be seen what will come of all these schemes. The last would appear to be the largest order of the three, and the least commendable. Horsemen who might otherwise look with favor upon the project do not see the wisdom of undertaking to confine the breed to the gray color. The blending of the two breeds is in itself a sufficiently difficult task to render success uncertain and tedious, not to say improbable.

While our American friends are doing so much con-

ing of legs and feet, sprightliness and trueness of action, especially in horses; thickness and firmness of flesh in meat-producing animals; size and form of udder and proper placing of teats in milking cows; wide and strong loins in all classes, together with the accepted indications of constitution. These last are, briefly stated, a broad chest floor, ample heart girth, deep and well-sprung ribs, and the comparatively short face, broad forehead, large muzzle and prominent eye, tokens, generally, of thrift and inherent good-feeding quality, or the faculty of making profitable use of the food consumed. Having placed the animals in apparent order of merit, a final closer examination should be made, testing by their walking or other action, and by standing them in different positions, and if after this critical comparison he concludes that a somewhat different

order of arrangement would be an improvement, he should have the courage to order it, even though some early hopes may be disappointed. In the case of two animals being so nearly equal in merit that the judge finds difficulty in deciding which should be given precedence, he will gain little, if any, help by hesitating long in making a selection, as it is probable the longer he delays the less confident he becomes.

The condition in which animals are shown sometimes makes it difficult for the judge to satisfy himself or the onlookers in the placing for prizes; an animal of excellent type and quality being shown in little more than ordinary breeding condition against one of less real merit, in respect to those qualities, but presented in high condition of flesh, and made flash by careful grooming. In such a case the judge, while disposed to reward the industry and ambition of the skillful groom, feeder and showman, requires to exercise courage and decision of character in his ruling, knowing that he is supposed to set the standard of type, and is in that sense expected to be an educator as well as an arbiter. The judge will do well also to observe the manner in which animals may be shown in order to hide defects. While he may in some cases feel like shaking the careless or indifferent herdsman who shows his beast for less than it is worthy, he should have an eye to the tricks of the trade, and be on guard lest he be misled by cunning effort to minimize the showing of a sway back, a hard-handling hide, a ewe neck, or faulty action.

These notes have been penned on the presumption of the single-judge system being adopted, for while there may be circumstances in which the adage "in the multitude of counsellors is safety" holds good, and there may be instances in which two judges are safer than one, yet, taken on the whole, in practice, we believe from observation quite as many mistakes are made by two or more judges as by one, provided the one knows from experience the classes of stock he undertakes to pass upon, and is wisely chosen. And such a man will satisfy himself better if working alone than with company, while there is economy of time and expense in the one-judge system, which is growing in favor as the years go by.

MANAGEMENT OF SHEEP.

In an interesting paper on "The General Management of Sheep," read by Mr. Alfred Mansell at the International Sheep-breeders' conference at Newcastle, he said the finest animals could be spoiled by bad management, and success as a breeder of pedigree sheep could only be achieved by strict attention to all details that made for success, paying particular attention to ensure the health of the lambs after weaning, so that the best growing period in a sheep's life was not jeopardized by injurious parasites. The great object in founding a flock should be to procure a uniform lot of ewes of the same character and type, and this could best be achieved by selecting the ewes from one or two old-established and carefully-bred flocks. Too much importance could not be attached to making a "correct start." Possessed of the ewes, attention should be given to improving the ewe flock, rather than an effort made to acquire a reputation as a ram-breeder by extensive showing. The first few years should be devoted to improving the ewes—an object which, though equally important, was more easily achieved and far less costly than ram-breeding, inasmuch as sires suitable for producing good ewes never commanded such high figures as those likely to obtain high-class rams. Once possessed of a good ewe flock, exhibiting uniformity of character and type, the greatest difficulty had been overcome, and by judicious mating a long and successful show and sale-yard career might be counted upon.

COLOR IN SHORTHORNS.

Professor James Wilson, of the Royal College of Science, Dublin, Ireland, has recently completed an interesting inquiry into the question of color variation in Shorthorn cattle, which has just been published by the Royal Dublin Society. Prof. Wilson's report reads as follows:—

"In a paper, 'On the Inheritance of Coat Color in Cattle,' published in 'Blometrika,' volume iv., Miss A. Barrington and Prof. Karl Pearson have collected statistics taken at random from Vols. xxxvii. to xlix. of the 'Shorthorn Herdbook' as to the colors of 2,172 calves and their parents. From these statistics it can be shown that as regards color, Shorthorns display Mendelian characters, the whites and the reds being the pure ancestral races, and the roans the hybrids.

"The following table is Miss Barrington and Prof. Pearson's second and third tables combined, the calves of both sexes being collected in one instead of being separated in two tables. But this table is framed with regard rather to the colors under which Shorthorns are entered in the herdbook than to the origin and history of the breed.

"The Shorthorn breed originated in the eighteenth century on the borders of Durham and York, in a part of the country which was the meeting-ground of the three races of cattle then existing in Britain—the Celtic, the Roman, and the Saxon. In pre-Roman times the Celtic race inhabited the whole of the island.

Its modern representatives are the black breeds of Scotland, Wales, and Ireland. The Romans introduced a white race, which they distributed throughout the parts of the country under their occupation. Its modern representatives are the white cattle of Wales, the wild white cattle of Chillingham, Cadzow, and other parks, and the white Shorthorns.

"The Anglo-Saxons introduced a red race which occupied England south of a line dipping southwards in the middle and drawn approximately from Hereford in the shire to Lincolnshire till about the middle of the eighteenth century, the mixed Celtic and Roman races having been driven northwards and westwards. The modern representatives of the red race are the Hereford, Devon, Sussex, Norfolk and Lincoln breeds.

"There was thus established a red race, holding the south of the island, and a black race with an admixture of white, holding the rest. Where the southern red race met the northern black and white races, there sprang up a new kind of cattle—the Longhorn—which is now almost extinct, but which, at the middle of the eighteenth century, occupied some of the midland counties and pressed northwards on both sides of the Pennine range into South Lancashire and Southwest Yorkshire. These cattle were a mixture possibly of all the three races; but they are not concerned in the present question.

"During the seventeenth century, and part of the eighteenth, and also probably at a somewhat earlier period, many cattle were imported from Holland to the

east of England, especially to Durham, York and Lincoln. These cattle were red-and-white and black-and-white flecked. The red-and-whites were most appreciated, and eventually swamped the others. These red-and-white cattle were of the same race as the red cattle brought over a thousand years before by the Anglo-Saxons. Although the cattle of the South of England were called red, they were not all entirely red any more than the black cattle now in Wales and Scotland are all entirely black. Notwithstanding a tendency on the part of breeders to breed it out, a patch of white on the underline is not uncommon among the red breeds; and the Herefords have white not only on the underline, but also on the face and along the back. It is not probable that old Anglo-Saxon cattle were as highly flecked as the red-and-white cattle imported later from Holland. The point is of no present importance, however.

"The earliest progenitors to which present-day Shorthorns can be clearly traced were white cattle, belonging to the Aislabies of Studley Royal (it has been suggested that the Studley Royal herd originated from the cattle of the monks of Fountains Abbey close by), near Ripon, whose herd dated back to the beginning of the eighteenth century. Studley Royal bulls were used by farmers in the neighboring districts. Celtic blood was also introduced to the stream from which modern Shorthorns are descended; and at least two instances are on record, viz.: through Lady Maynard, calved in 1789, which was 'descended from a black cow with white belly and white legs to the knee,' and through Grandson of Bolingbroke, calved in 1794, whose granddam was a 'red Galloway.' But the main stream consisted chiefly of Saxon cattle, more especially of the branch introduced from Holland in the seventeenth and eighteenth centuries. It would not be safe to say that there were none of the old Anglo-Saxon red cattle near the birthplace of the Shorthorn in the eighteenth century; but, if they were there, they were in a minority. The whole of the recruits drawn into the Shorthorn breed during the last 100 years have been drawn from the two branches of the Saxon race, although perhaps, as time went on, the red branch has been drawn upon more eagerly.



Double Abbotsford.

Two-year-old Shorthorn bull. Winner at Dublin Spring Show. Sold, for export to Argentine, for \$1,000.

Coat color of dams.	COAT COLOR OF Sires.					Coat color of calves.
	Red.	Red, little white.	Red and white.	Roan.	White.	
Red—	156	23	10	126	1	Red
	23	12	6	20	...	Red, little white
	11	3	3	15	1	Red and white
	6	1	5	167	40	Roan
	...	...	...	4	...	White
Red, little white—	18	8	...	22	...	Red
	18	6	1	10	...	Red, little white
	5	4	2	8	...	Red and white
	1	1	1	43	10	Roan
	...	...	...	...	...	White
Red and white—	31	4	6	20	1	Red
	12	4	1	15	...	Red, little white
	23	10	18	21	...	Red and white
	4	5	1	81	18	Roan
	...	...	...	...	...	White
Roan—	117	19	14	86	...	Red
	26	9	3	31	...	Red, little white
	24	9	5	35	...	Red and white
	157	42	31	218	14	Roan
	...	...	...	84	9	White
White—	...	...	...	1	...	Red
	1	...	...	1	...	Red, little white
	2	...	1	1	...	Red and white
	45	7	8	33	...	Roan
	...	...	...	15	3	White



Judging Yearling Shorthorn Bulls at Winnipeg Exhibition.

"It happens among polygamous pure-bred stock that, in a few generations, unless it be specially eliminated, a progenitor's blood runs in the veins of numerous descendants. An illustrious sire gets, perhaps, 20 sons; his sons again get 300 or 400; these again get 4,000 or 5,000; and so on, until it may be difficult to find an animal which is not the illustrious sire's descendant. Thus at the present day there are not many Shorthorns which are not descended from Cruickshank's Champion of England, born in 1860, and none which are not descended from Charles Colling's Comet, born in 1805, and descended from Studley Royal stock, and also from Lady Maynard. Thus the blood of the old Studley Royal white cattle, of the old Saxon red and red-and-white cattle, and of the Northern black cattle, flows in every Shorthorn alive to-day. But the black color, if it can be said ever to have been bred within the breed, was soon bred out. It was unpopular even in the eighteenth century. Mendel's law shows how easily a foreign color or any other outward signs of a foreign cross may be bred out.

"Thus in the matter of color, at any rate, the modern Shorthorn is descended from two races, the White Roman and the Red Saxon, the 'red' including red, red with little white, and red and white. The table of coat colors should, therefore, be reconstructed on the basis that the Saxon 'reds' are one of the ancestral races, and the Roman white cattle the other. The table then becomes as follows:

Coat color of dams.	Coat color of sires.			Coat color of calves.
	Red.	Roan.	White.	
Red	418	257	3	Red
Red	25	291	68	Roan
Red	0	4	0	White
Roan.....	226	152	0	Red
Roan.....	230	278	14	Roan
Roan.....	0	84	9	White
White.....	4	3	0	Red
White.....	60	33	0	Roan
White.....	0	15	3	White

"Expressed in the usual Mendelian manner, these figures show that:—

	Reds.	Roans.	Whites.
438 reds, crossed by reds, produce	418	25	...
3 whites, crossed by whites, produce	...	...	3
135 whites, crossed by reds, produce	7	128	...
514 roans, crossed by roans, produce	...	152	278
1,008 roans, crossed by reds, produce	483	521	4
74 roans, crossed by whites, produce	3	47	24

"These figures do not come out in Mendelian ratios with perfect accuracy; but the discrepancies can be explained. They are the result of three causes, viz.: (a) Sometimes it requires a close examination to tell whether a calf is really red or roan. Breeders have not hitherto examined the colors of their calves with a view to greater accuracy than commerce required; and so some errors of description have crept into the herdbook. (b) White Shorthorns are of smaller money value than roans or reds, and, consequently, many are not registered at all. This happens especially with animals of little merit. (c) Among unscrupulous breeders the substitution of a colored calf for a white one is not unknown, a white calf's pedigree being bestowed upon a roan or a red.

"To eliminate these sources of error as far as possible, I have collected a new set of data, which is made up of every entry in Volume 52 (published in November, 1906) of the Shorthorn Herdbook, by a number of breeders who may be expected, because of the high value of their cattle, to register a very high proportion of their calves, and who would not substitute one calf for another. Two of the sources of error cannot, however, be entirely eliminated, viz.: the error of wrong

description and the error arising from some white calves not being registered. For instance, a bull standing now at the Albert Agricultural College, Glasnevin, was registered in the herdbook by his breeder, who is the most distinguished breeder in England, as being red. This bull's sire was white; his dam was red; and he ought, therefore, to be roan. He has bred several white calves from roan cows, and on this ground also he ought to be roan. On close inspection he is a roan, but such a roan as might easily be mistaken for a red.

"Amongst breeders the prejudice against white cattle is very strong, but especially against an animal some of whose ancestors were white. There is an impression that a white animal from roan parents may produce some white calves, but that a white animal from one or two white parents will produce many white calves; consequently, even in the best herds some white calves are not registered at all, more especially if they have a white parent. For the reason that white calves are not desired, two white animals are very seldom mated. Among the 2,172 matings collected by Miss Barrington and Prof. Pearson, only three such cases occur. In the 1,023 matings which I have collected, only one case occurs. The paucity of white matings detracts from the completeness of the data; but the necessary numbers can be made up from other data collected by Miss Barrington and Prof. Pearson. They searched the herdbook for white matings, and found that 91 such cases produced 1 red calf, 4 roans, and 86 whites. In view of the causes of error mentioned, and the regularity with which the Mendelian law operates, these 5 colored calves may be set down as substitutes, or the progeny of erroneously described parents. Expressed in Mendelian form, the data I have collected give the following results:—

	Reds.	Roans.	Whites.
95 reds, crossed by reds, produce	90	5	0
1 white, crossed by white, produces	0	0	1
78 reds, crossed by whites, produce	0	78	0
370 roans, crossed by roans, produce	90	178	102
426 roans, crossed by reds, produce	214	209	3
53 roans, crossed by whites, produce	0	34	19
1,023			

"Remembering the sources of error, these figures approximate sufficiently closely to Mendelian ratios to show that the roan Shorthorn is a hybrid between two races—one white, the other 'red.' It may be of some interest to show the colors of the calves when reds are crossed by roans—first, when the bull is red; and, secondly, when the bull is roan. They are as follows:

	Reds.	Roans.	Whites.
150 red bulls produced from 150 roan cows	86	63	1
276 roan bulls produced from 276 red cows	128	146	2

THE FARM.

NOTES FROM IRELAND.

ENCOURAGEMENT FOR TOBACCO-GROWERS.

The efforts that have, during the past half decade and more, been put forward to revive tobacco-growing in Ireland, give promise of producing permanent results. Some of the pioneers in the movement have been exhibiting great enterprise in engaging experts from abroad to superintend their local operations, and the suitability of the climate and soil in different parts of the island for the crop have been fully demonstrated. Of course, as I pointed out in some previous letters, considerable formality

had to be gone through by prospective growers in order to obtain Governmental sanction even to experiment with the crop, but the passing of the Irish Tobacco Act last year afforded greater facilities. Having got thus far, the enthusiastic advocates of the weed persisted in pressing the Government for actual financial assistance, and, by dint of much persuasion by our Parliamentary representatives, the Chancellor of the Exchequer has at last been induced to give, through the Department of Agriculture, an annual grant of £6,000 for the development of the tobacco industry in Ireland during the next five years. No sooner was this cheerful announcement made than appeals came from England, Scotland and Wales for similar grants, but none of these countries have undertaken the laborious and voluntary experiments that Ireland has carried out, and, until they do, they cannot consider themselves entitled to State assistance. In this particular instance the Government helped those who helped themselves.

CREAMERIES CRITICISED.

It is a mistake to look for perfection in any organization in this world, and the creamery movement must be prepared to stand its share of criticism, and have its defects revealed under the light of the same. In Ireland, creameries have become firmly-established features in our dairy industry, and it stands to reason that their existence means, to a certain extent, the extinction of home buttermaking, and, therefore, an absence of a very desirable class of occupation for farmers' wives and daughters. This is an objection that has recently been urged by Dr. Clancy, one of the Roman Catholic Bishops in Ireland; but it is not the only feature to which he takes exception. It may be of interest to briefly state the grounds on which this reverend gentleman questions the beneficial influence which the creamery system exerts. He contends (1) that the carting of milk to the central depot takes up the time of children who ought to be at school; (2) that the assembling at the creameries, and the delays while waiting to be attended to, give scope for idleness, and even worse evils, especially where the inevitable public house is in the vicinity; (3) that home dairying has been rendered a thing of the past; (4) that the eagerness for great profits from the creamery induces the farmers to send all their milk to it, which obviously means depriving their families of this most essential article of food, tea being resorted to as a most undesirable substitute; (5) that there is considerable danger of spreading the germs of diseases through the medium of creameries; (6) that the skim milk can never be made equal to the whole milk for calf-rearing purposes; (7) that the existence of creameries has exerted a very destructive influence on the business of the country towns where butter markets used to flourish. The money formerly received by the farmers at these markets was circulated among the shopkeepers in the towns, but since the butter markets became defunct, the commercial traveller plies a successful grocery and soft-goods business by the luggage van and the parcels-post, and a hundred interests that benefited by the interdependence of supply and demand seem to have become dead. All the foregoing is very weighty, and though it was not the intention of Dr. Clancy to condemn co-operative dairying, his lordship certainly has shown that the system is by no means free from defects. Sir Horace Plunkett, the leader of the movement, has defended it against these various criticisms, pointing out that such evils as employing school children and giving opportunities for drunkenness were being discouraged as far as possible. With reference to other points, Sir Horace gave this trenchant reply: "The remedy for the underfeeding of calves is not a reversion to a less profitable system of buttermaking, but an intelligent, economic and easily-understood method



Watching the Races at Edmonton.

of supplementing the separated milk with the missing ingredients of a proper dietary. How would we feel if we ever have to confess that the creameries of Ireland were suppressed because our countrymen are so degraded by these wealth-producing agencies that they have not the humanity to give proper nourishment to their children, or the intelligence not to starve their calves?" With reference to the passing of home dairying, the plea was that it was merely a sign of the changing times, and the same applied to the altered conditions of local shopkeepers.

CANADIAN CATTLE.

Unless I am very much mistaken, the agitation in favor of removing the embargo on Canadian cattle is going to make its biggest bid for success in the near future. The very influential deputations that waited on the Prime Minister, Mr. Asquith, the other day, received a reception that has created some uneasiness among those who strenuously oppose any tampering with the existing restrictions. The Premier has promised to consult the President of the Board of Agriculture, Lord Carrington, but unless the latter has modified his views considerably since the last Parliamentary discussion, I don't think that he will consent to abandon the position which he then took up against the proposed changes. Of course, there is a political as well as an economic element in all these movements, and the present Government is in anything but a stable condition, as witness every bye-election during the past few years. Anything that would lead to a reduction of the price of beef, which lately rose appreciably, would, therefore, be a very catchy attraction in the eyes of "the man in the street," and it may be that this consideration will influence the Cabinet towards a decision which would satisfy the constant appeals of those who have been clamoring for Canadian stores, but would, it is to be feared, cause very grave misgivings to home breeders, both in Ireland and Great Britain. It may be pointed out that the wholesale price of beef has already returned to its normal level, though retail butchers have endeavored to conceal this fact from consumers in our towns and cities. All concerned will watch coming developments with keen interest, and await with anxious suspense the result of the very determined effort which has been put forth afresh to secure the relaxation of the embargo.

"EMERALD ISLE."

FALL - WHEAT SEEDING.

In a month from the present date wheat-seeding will be in order in districts where it succeeds. The success of this crop, as of all others, depends very largely on the preparation and condition of the soil, the time of sowing, and the suitability of the variety to the soil and climatic conditions of the district. In sections where it has not been proved a success, it should be tried only experimentally on a small scale, and it is wisely sown only to a limited extent in any place, owing to its uncertain endurance of the severity of our winters. The general success of the crop of the present year, however, gives encouragement to continue its cultivation more or less, and part of the business of the next few weeks will be the preparation of the land for this purpose. And the sooner plowing and tillage is commenced, the better, as a fine and firm seed-bed is essential to successful germination of the seed, and to vigorous, well-rooted plants which will most likely weather the storms of winter and the stress of drying spring winds.

We know how difficult it is to find time for plowing in the harvest season, but there are generally some slack days, due to wet weather or the waiting for a crop to ripen or to dry, when the teams may be employed at plowing and tilling the land intended for wheat. In our travels in Western Ontario, in the last week or two we have seen a number of fields already plowed, evidently for this purpose, and some rolled and harrowed, as they should be, immediately after the plowing, in order to conserve the moisture in the soil and secure firmness of the land. In too many cases this is neglected, the land being left in the furrows, exposed to the influence of sun and wind, to be dried out and hardened, requiring much more labor to get it into suitable condition for seeding, and resulting in a seed-bed lacking in moisture and in available plant food. A clover sod, plowed early in August, and frequently harrowed or lightly cultivated, is one of the best preparations for fall wheat, though a pea stubble or barley stubble, if the land is in good heart, may answer the purpose well. Where the peas have been grown on a sod field, plowed in the spring, the preparation for wheat may in some cases consist of surface cultivation alone, without plowing, and we have seen excellent crops grown from such management, as also from surface cultivation after harvesting ensilage corn, where the corn has been removed early enough. The essential points to observe are these: Attempt the preparation of no more land than is in a good state of fertility and can be properly prepared early enough to give the wheat a good start; reduce the land to a fine tilth by frequent cultivation, and sow in the early days of

September a variety that has succeeded well in your district, or under the varying conditions in many districts.

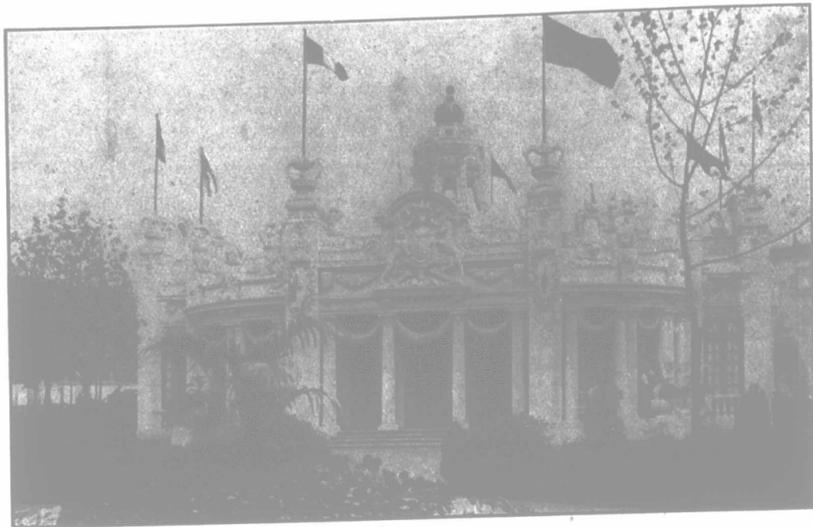
CANADA AT THE FRANCO-BRITISH EXHIBITION

The Franco-British Exhibition, in London, England, is, in reality, as well as in name, French and British. The exhibits, which are well divided between the two nations, are comprehensive and very representative of the arts and manufacturing industries. Grounds consisting of 120 acres are used, 40 acres of which are under cover; they are conveniently situated, being within 25 minutes of the Bank (the heart of the city), and are reached by "Tube," which is an electric railway in a tunnel over one hundred feet below the sur-

covered grounds are well laid out in gardens, presenting a profusion of bloom and foliage.

Great Britain beyond the seas is extremely well represented. New Zealand, Australia and Canada have separate exhibits in buildings constructed by their own governments. Australia has made a most attractive display, the produce of each of her provinces being well arranged in sections.

Canada, under the experienced and capable management of Colonel Hutchison, has done herself proud; there has been no stinting in expenditure; \$60,000 was paid for the rent of the ground upon which the building, 350 x 150 feet, has been erected, at a cost of \$120,000. It is estimated that the total expenditure for this advertisement will amount to about \$300,000. There



Franco-British Exhibition: The Royal Pavilion.

face of the ground, the "Underground," which is another railway, running just under the surface of the ground; and street-cars, and motors and horse omnibuses by the thousand.

On a recent holiday, over half a million people passed through the turnstiles, and the exhibition had just got nicely started. It is expected that there will be many such days, especially during the Olympic Games which are being held in connection this month. The stadium encircling the sports ground has a seating capacity for 60,000 spectators.

The buildings are white, of most artistic architecture, and they are very beautiful. The un-

nothing Provincial about this exhibit. It is Canada as a whole; Canada, Great Britain's granary; Canada, the great wheat-producing country, is the predominating characteristic of the whole exhibit. The interior of the building on all sides is made up of representations of large trees, the trunks, branches and leaves being made of heads of wheat, the trees being introduced as emblematic of strength—Canada's strong wheat. The idea is most distinctive, and is well carried out; every man, woman and child visiting the building must come away with the desired impression: Canada for wheat.

While wheat is the dominating feature, other



Canadian Fruit Exhibit at the Franco-British Exhibition.

(Photo by Valentine & Sons, Ltd.)

branches of agriculture, manufacture and other industries are not overlooked, but touched with a lighter hand. In a large, refrigerated chamber, with double-glass sides and ends, there are life-sized figures, modelled in butter, of Jacques Cartier, standing in a row-boat about to land on the banks of the St. Lawrence, where an Indian is seen in possession. In another section are life-sized figures of the King of England shaking hands with the President of France; another is the bust of Hon. Sydney Fisher, Minister of Agriculture. All are well done, being good representations—and all butter. Of course, cheese and bacon have also a place in this section. On one side of the pavilion is a large and comprehensive display of apples set out on glass dishes placed on small round tables. Very mouth-watering do they look and smell, and a few million visitors will, like myself, reluctantly turn from these with the regret that they are not giving samples away.

On the opposite side of the pavilion are displayed some of the pulpwood and timbers of Canada, at the base of which is a beaver dam, and a beaver pond, and in it live beavers—our first engineers. These industrious little wonders are proving a great draw; they always have a large audience.

At one end of this great building are large oil-paintings of the late Sir John A. Macdonald and Sir Wilfrid Laurier, coupled by the words, "Nation Builders." And just here, the importance of the present large railway-construction undertakings is featured by a large painting of Canada, showing the railroads, stating the number of miles of railways operated, and the number under construction.

At the bottom are two tanks, one containing salmon, and backed by a painting of a river scene in British Columbia, with the salmon pictured passing up the river in the great numbers that they sometimes do during the spawning season; and the other tank contains cod, and supported by an Atlantic-coast fishing scene. The fish in the tanks are so well stuffed that they look quite life-like.

At the other end of the hall are large paintings of Canada's grand old man, Lord Strathcona, and the Governor-General, Earl Grey.

The eye is met, wherever one looks, by short, pithy paragraphs, in plain, readable lettering, of what prominent men have said of Canada, of what has and is being done in Canada, and what the future of Canada offers to the capable, wise, industrious settlers who embrace its opportunities.

While the multitudinous articles of manufacture, from canoes to carriages, binders to boots, furs to furniture, all have a place in this large building, yet the natural produce—minerals, forestry, and agriculture—predominates, and wheat is the king-pin of the whole display—Canada for wheat—hard wheat.

T. S. WELD.

THE SEASON AND THE CROPS.

From nearly all parts of the Dominion come favorable reports of the crops generally. Timely rains in most sections have kept the pastures fresh through the period of summer in which, as a rule, they suffer from drouth, and when, as a consequence, the milk supply in dairy herds falls off and the stock fails in flesh, unless furnished supplementary fodder or grain food. The hay crop harvested has bulked larger than was expected in the spring months, and winter wheat, where grown, has, as a rule, been garnered in good condition, and will yield an average of bushels. The oat crop, so largely grown, and so generally depended upon as a safe and suitable food for man and beast, and which last year proved a partial failure in many districts, promises an abundant yield, and, if safely harvested, will prove a very profitable crop. The Western wheat and oat fields give promise of yielding bountifully, and, as they will ripen much earlier than last year, will probably escape the danger of frost, and will gladden the hearts of the farmers, and give impetus to business in general. In the corn-growing sections a larger acreage than usual has been planted, and the prospect for well-filled cribs and siloes is decidedly encouraging, while fruits and roots will probably give at least an average yield. On the whole, the growing season has been favorable, the summer a model one, farmers have bright prospects of a generous return for their labor, and business men have promise of better times in the near future.

NEIGHBORLY NEIGHBORS.

A subscriber writes us, reciting a fine illustration of neighborliness recently witnessed in Waterloo County, Ontario, which speaks well for the generosity of the warm-hearted people of that prosperous farming district:

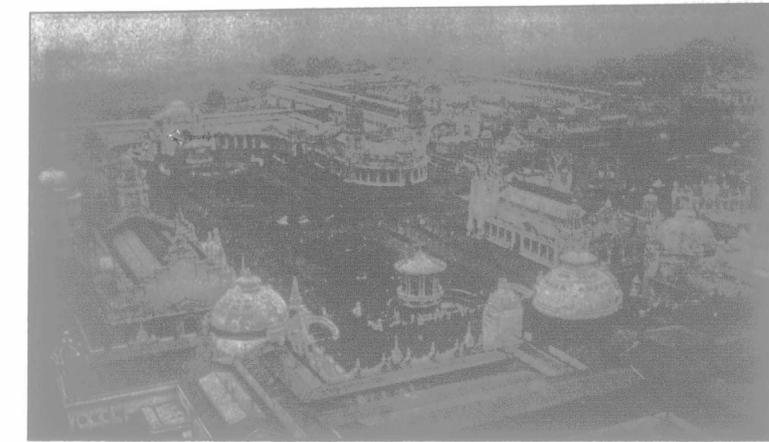
On the afternoon of June 23rd, during one of those severe electrical storms which did so much damage to property in the vicinity, Mr. A. L. Shantz's large barn was struck by lightning and burned to the ground, and considerable live stock and implements were consumed, entailing a loss of about \$3,700, partly covered by insurance. By

eight o'clock of the evening of the fire, it is said, the contract was let for most of the work of rebuilding, and in the next few days, from forty to fifty men, mostly neighbors, were at work gratuitously helping to clear away the ruins, cutting timber in the woods, hauling it to the mill, and

of 12 feet, and a straw shed 42 x 54, and the whole 48 feet high at the ridge, with a double-hip roof. It is said that, by actual count, 480 meals were served during the period of preparation, before the day of the raising, and that on that day 243 men sat down to partake of a

sumptuous dinner provided by about sixty ladies who had come with their husbands and fathers, and had brought with them an abundance of eatables. The meal was one such as the German ladies of Waterloo County are famed for providing, and the splendid new structure stands as a monument of the commendable spirit of brotherly kindness of the farmers of the community.

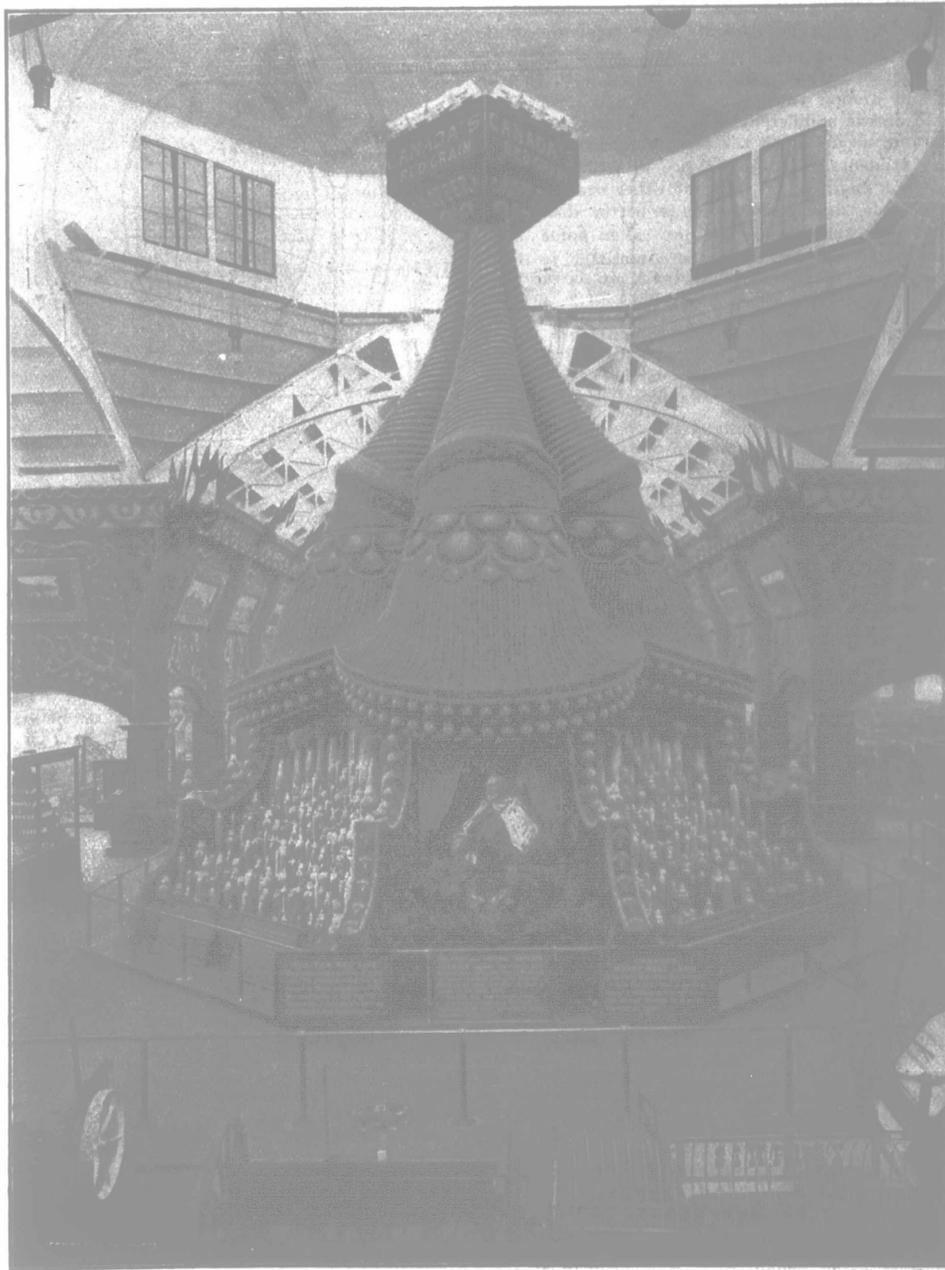
The importance of the observance of care in the purchase of sound seed corn, and having its germinating qualities tested before planting, has seldom been more clearly il-



Franco-British Exhibition, London W.: Bird's-eye View from a Balloon.

bringing home the lumber, carrying with them food for themselves and their teams. At the end of three weeks from the date of the fire, the neighbors for miles around, on invitation, assembled to help with the raising of the timbers for the new barn, 70 x 84 feet, with an overshot

lustrated than this year. The folly of taking chances in this matter is exemplified in fields showing here and there at wide intervals scraggy and struggling stalks, while in fields planted with sound seed the crop is full and strong and healthy, promising a bountiful yield of first-class fodder.



Interior View of Canadian Building, Franco-British Exhibition.

THE DAIRY.

A VISIT TO CORNELL UNIVERSITY AND AGRICULTURAL COLLEGE.

OFFICIAL DAIRY INSTRUCTORS' ASSOCIATION MEETING.

It was our pleasure, during the week of July 20th, to visit the famous "Cornell" American Agricultural College, located at Ithaca, New York. The "Graduate School of Agriculture" was in session at the time, but our main purpose was to attend the third annual meeting of the Dairy Instructors' Association.

This Association is one of the newer organizations for the promotion of dairy knowledge. It is composed of the State Instructors and Investigators of the United States and Canada, though Canadians, up to the present, have not been represented in large numbers, but those who have attended have been received very cordially. The object of the Association is to promote uniformity in methods of conducting experimental and investigational work, and also to promote more uniform courses in dairying. Some of the American colleges give neither lectures nor practical work in dairying until the junior and senior years. As one instructor expressed it, "After all the other departments have selected the graduating men whom they want, those left over take dairying." The chairman of the committee on "Courses of Instruction," Prof. Van Norman, of Pennsylvania, made a strong plea for better men and better methods of teaching, and pointed out how dairying might be made of much greater pedagogic value than it is at present. As an instance, he said, if ten average students were told to count the number of revolutions which a separator-bowl was making, some would not know how to do so, and among those who did, nearly every one would obtain a different answer. This was due to a lack of accuracy on the part of agricultural and dairy students. His experience was that students who took engineering, or some other branch of exact science, first, usually made better dairy students than those who had not taken some such course. It was left with the committee to draft a "model course in dairying," to cover four years, and to be taken as a part of a general course in agriculture. We shall look forward with interest to the report of this committee. It is likely that all the courses in agriculture could be revised with profit from time to time. Mouldering branches should be cut away, and new grafts inserted from time to time. A little "budding," by way of experiment, might also be useful. One of the longest discussions arose over the report of committee on score-card for dairies. Suggestions were made as to improvement, which were under consideration by the committee when we were obliged to leave, but it is likely that the card will be accepted by the Association practically as given, although it is probable that the number of points will be equally divided between "equipment" and "methods"; i. e., 50 points for each.

The committee on "Official Testing of Dairy Cows" recommended rules and standards to be accepted by all the American Breeders' Associations. These rules have been accepted by practically all the American Associations, and it is hoped that the Canadian associations will also fall in line. The Canadians are now one step in advance of the Americans in the nationalization of their records. Now, if they would go one step further, and have the "same standard for all breeds," it would simplify matters a great deal. We never could see why Holstein cows should be required to come up to one standard, Jerseys another, Ayrshires something different, and Canadians and Guernseys something else. Why not make them all the same? The proposed yearly minimum standard for mature cows is 10,000 pounds milk, or 360 pounds fat. Lower standards are set for young cows. Personally, we should favor eliminating the age factor entirely, and allow a cow to enter the "Advanced Registry" or "Record of Merit," or whatever name is given to it, when they come up to a certain standard, no matter what the age. However, the majority of the committee did not fall in with this view. Yearly tests are recommended in preference to tests for a shorter period.

It was also decided to recommend that the National Dairy Show, to be held in Chicago next December, have a students' judging contest in dairy cattle. We understand that this contest will be open to students from Canadian agricultural colleges. In order to obtain lessons in the judging of dairy products, it was decided to ask the management of the show to have experts give one or more lessons to those in attendance.

During one of the sessions, a photo of the late Major Alvord, Chief of the Dairy Division of the Department of Agriculture, Washington, was unveiled in the lecture-room of the new Dairy Building, by Chairman Pearson, formerly Professor of Dairying at Cornell, now Commissioner of Agriculture for New York. The photos of a number of prominent American dairymen adorn the walls of the splendid new building, which, by the way, is now in charge of Dr. Publow, formerly one of the dairy instructors of Eastern Ontario. The Agricultural and Dairy Buildings are a fine block, and do credit to the University.

We always enjoy a visit to Uncle Sam and our American cousins. The dairy instructors of the United States are as fine a body of men as one could wish to meet. Most of them are young men, with all the enthusiasm of youth. A similar organization among Canadian Dairy Instructors and Investigators would prove of great value to the dairy industry of Canada.

There is one thing that always mars to some extent a visit to Uncle Sam. While the train was still on Canadian soil, a person in blue uniform, and having the letters U. S. prominently displayed, came into the car at Niagara Falls, Ont., and put all the passengers through an examination somewhat as follows:

"Air you an Amurrikin citizen?"

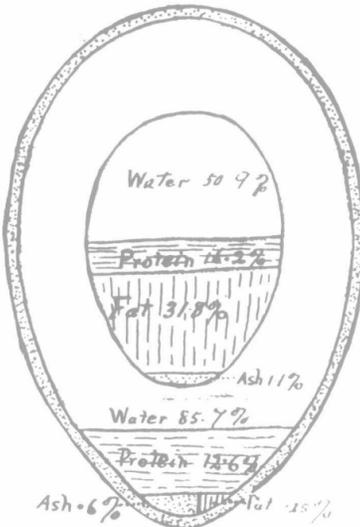
To which we replied, "No, sir, I am a Canadian."

"Do you expect to remain permanently in the United States?"

"Not unless we get in jail and can't get back to Canada."

"What are you going to the United States for?"

We felt like saying, "None of your business."



Composition of an Egg.
(Shown diagrammatically.)

Shell=nearly all (96%) carbonate of lime.
White=nearly seven-eighths water; the rest practically all protein.
Yolk=one-half water; the other half, one-third protein, two-thirds fat.

but we told him we were going to attend a meeting of the Official Dairy Instructors' Association, of which we were a member.

After looking at us very carefully he passed on to put others through the same ordeal. We suggest to Uncle Sam that he "cut this out," as we do not believe the American people desire that persons entering their country for a friendly visit shall be put through a sweat-box examination. A woman on the train was very indignant that she should be so insulted. On our return we were met by the usual Canadian Customs Officer, and a Canadian Immigration Officer who followed the Customs Officer, but passengers were not subjected to a cross-examination. It was a lesson in manners which we trust our American friends will copy.

The incident reminds us of a story: Once upon a time a skunk thought he would travel and see the world. Noting a hole in the side of a hill, he decided to enter. At the end he found a woodchuck comfortably enjoying a snooze. On waking up his new-found mate, he desired to get upon friendly terms with him. After considerable talk, in which the skunk tried to impress upon the woodchuck that he was a distant relative of his, and that he would like to share the comfortable home of his underground neighbor, the woodchuck sat up, in his well-known manner, and said: "You walk something like a woodchuck, you eat like a woodchuck, you talk like a woodchuck, but I'll be—-if you smell like one." This ended their acquaintance. H. H. D.

MAGNITUDE AND VALUE OF DAIRY PRODUCTS.

The importance to the health of the people of cleanliness and care in the handling of milk, is emphasized by a consideration of the vast magnitude of the dairy industry, the Canadian export product of which, in 1906, was valued at \$25,000,000, while the home consumption was nearly as great in quantity, and the demand is rapidly increasing as our towns and cities grow. It is stated that, in the United States, the production and consumption of milk amounts to over 9,000,000,000 gallons per year, being an annual supply of over 100 gallons for every man, woman and child in the country, affording 1.1 quarts a day for every individual, which includes the milk used in making butter and cheese. The value of this product for a year, at retail, is the startling sum of \$2,500,000,000. This is about five times the wholesale value of last year's wheat crop, nearly twice the value of the corn crop, and one-third of the entire value of farm products in that country for 1907, which is estimated at \$7,400,000,000. The wholesale value of dairy products last year was estimated at \$800,000,000, which would allow a price of less than ten cents a gallon for milk at the dairy. An average retail price of seven cents a quart was assumed, which is probably a little below the average price.

POULTRY.

EGGS AND THEIR FOOD VALUE.

By Prof. J. F. Snell, Macdonald College.

Someone has poetically described eggs as—

"Treasure houses wherein lie,
Locked by angels' alchemy,
Milk and hair and blood and bone."

The lines were no doubt designed to express tersely the relation of the egg to the chick hatched from it, for enclosed within the shell is not merely the germ, with its marvellous power of development into a new individual of its species, but also a store of food, suited to the requirements of infant life, and sufficient to provide the chick with the "hair and blood and bone" with which it emerges, full-armed, into the outer world. Indeed, to the great majority of feathered infants (the pigeon being one well-known exception) the contents of this storehouse is the only milk that nature provides. The inference is an obvious one, that, containing, as they do, ingredients naturally adapted to the earliest stages of animal life, eggs should constitute an appropriate article of food for children, and we shall see that chemistry lends its support to this inference, though it likewise confirms the observation of experience, that bad cooking (which, in the case of eggs, is usually overcooking) may materially alter the condition of the food, and render it so difficult of digestion as to be utterly unsuited for the use of the young.

Like all succulent foods, eggs contain a large proportion of water. The quantity amounts to about seventy-four per cent. of the total weight of the contents of the shell, not including the shell itself, which is, of course, much drier. Thus, water constitutes very nearly three-fourths of the contents of the egg, the proportion of water being almost exactly the same as in the flesh of a broiler, but considerably greater than that in the flesh of a full-grown hen. The water of the egg is unequally distributed between the white and the yolk, the former being seven-eighths (accurately, 85.7 per cent.), the latter only about one-half water (50.9 per cent.). From this standpoint, then, the yolk of the egg is a much richer food than the white—just as solid meat is richer food than soup. To get the same weight of solid food from white of egg as from one pound of yolks, we should have to take one and three-quarters pounds of white. We shall see later that there is another sense in which the yolk of the egg is to be regarded as a richer food than the white. Our present point is merely that, weight for weight, it is a more concentrated, a less watery, food than the white.

The relative proportion of water and solid matter in white and yolk are shown in the accompanying diagram, the unshaded portions representing water, and the variously shaded portions the different classes of solids. It will be noticed that the unshaded portion of the white comprises a much larger proportion of the whole than is the case in the yolk. But although the yolk is the more concentrated portion of the egg, it is the smaller of the two in size and weight. I wonder how many egg-eaters have ever stopped to compare the relative quantities of the two divisions of the egg. Doubtless most of us know that the white is the larger, but how many have any idea how much larger? As a matter of fact, the white is, on the average, nearly twice the weight of the yolk. In other words, roughly, one-third of the edible weight of the egg is yolk, and two-thirds white. More exactly, the average figures are: Shell, about 12 per cent. of the whole egg; white, about 58 per cent. of the whole egg; yolk, about 30 per cent. of the whole egg; or, of the edible

portion the white constitutes 85 per cent., and the yolk 34 per cent.

Taking these figures in conjunction with the respective proportions of water in white and yolk, we see that, of the total solids of the egg, about one-third is contained in the white and two-thirds in the yolk; for the yolk forms one-third of the contents of the egg, and about one-half of the yolk is solid matter, so the solid matter of the yolk constitutes (one-half of one-third =) one-sixth of the total weight of the egg contents. And, of the white, which constitutes two-thirds of the total weight, only one-eighth is solid matter; accordingly, the solid matter of the white comprises (one-eighth of two-thirds =) one-twelfth of the total contents. The yolk solids, therefore, weigh twice as much as the white solids; or the yolk contains two-thirds, and the white one-third, of the solid matter of the egg, exclusive of the shell.

If the solids of the yolk and white were identical in composition, then the food value of the yolk of an average egg would be about twice that of the white. But the solid matter of the two is by no means identical, and, to explain the difference, it will be necessary to define some chemical terms probably not understood by some of our readers, though doubtless familiar to many.

If we were to remove all the water from an egg, or from a chicken, or a piece of meat, we should find that the remaining substances—constituting the "dry matter" or "total solids"—could be divided into two classes, those which will burn, and those which will not. The former constitutes the organic substances of the egg or meat, the latter the inorganic substances or "mineral matter." When the dried egg or meat is burned, the mineral matter is left behind as an ash, while the organic matter disappears (being converted into gases, which pass off into the air). But if, instead of burning out the organic matter, we were to extract the dried substance with ether or with gasoline, we should find that a part goes into solution, while the remainder remains undissolved. The part which dissolves in the ether or gasoline is the fat. Fat is one sort of organic matter. The undissolved residue contains the mineral matter (ash), but also a quantity of organic matter, more abundant than the ash, and quite different in composition and properties from the fat. In the case of the pieces of meat, the organic matter left undissolved by the ether is the lean of the meat, the muscular fiber of the animal. It consists of what we call protein or nitrogenous organic matter. Fat contains carbon, hydrogen and oxygen, but no nitrogen. Protein is about one-sixth nitrogen, the remainder being mostly carbon, hydrogen, and oxygen.

Food has two functions: First, the replacement of worn-out cellular tissue; second, the production of heat and muscular work. For the purpose of the second of these functions, the supplying of heat to keep the body warm, and of energy to enable it to work, fat is the most concentrated, the richest, of our foods. One pound of fat supplies nearly two and a half times as much energy (in the form of heat or work) as one pound of protein or one pound of sugar or starch. On the other hand, protein alone can build up new muscular tissue in the growing child, or replace the used-up tissues of the body of either child or adult. Protein is thus the most essential, the most indispensable food. It must form a part of every diet. One could not live on fat alone, nor on sugar or starchy foods: Fat pork requires, as accompaniment, either some lean, or a vegetable rich in protein, such as beans or peas. Even fat pork and potatoes would not form a satisfactory diet, since neither contains more than a very little of the indispensable nutrient, protein.

The organic matter of the egg consists of these two important nutrients (protein and fat), but the relative quantities of the two are very different in white and yolk. The diagram makes this very clear. The organic matter of the white is practically all protein (albumen), with the exception of the very minute quantity represented by the small space at the lower right-hand corner of the diagram. The yolk, on the other hand, has twice as much fat as protein. If we leave the water out of consideration, we find the proportion of the dry matter in white and yolk to be as follows:

	Protein.	Fat.	Ash.
White	94	2	4 per cent.
Yolk	33	65	2 per cent.

Remembering that the yolk contains twice as great a weight of total solids as the white, we get a better idea of the relative quantities of each class of solids in the two divisions of the egg by multiplying the second line of the above table by two. On doing so, we find that the white and yolk of an egg have about equal quantities of ash (the yolk actually somewhat the larger quantity. See below), and that the yolk has two-thirds as much protein and sixty-five times as much fat as the white. We can compare the energy-producing powers of the two by multiplying the fat in each case by 2½ (more accurately, 2.4) and adding the protein. Doing so, we find that the yolk has nearly four times the value of the white. From

this very important standpoint, then, nearly four-fifths of the nutritive value of the egg is concentrated in the little yolk. In energy-producing value, or "fuel value" (as it is often termed), egg yolk is about the equal, weight for weight, of wheat flour, roast beef, or medium fat mutton; while the white is hardly equal to a poor milk. The egg, as a whole, is about equal in fuel value to its own weight of very lean beef.

When we leave out of consideration the shell, which, with the exception of about four per cent. of binding material—similar to that in hoofs and horns—is entirely made up of mineral matter of the same composition of limestone, the mineral matter of the egg, like that of other foods, comprises only a small proportion of the total weight. The ash of the white only amounts to about 4½ per cent., and that of the yolk to only 3 per cent., of the total dry matter. But as the total dry substance of the yolk is, as we have seen, nearly twice that of the white, the yolk actually yields a somewhat larger quantity of ash than the white. What is more remarkable and more significant is that the ashes of the two divisions of the egg are entirely different in composition. Those of the white are alkaline, those of the yolk are acid. The ash of the white consists chiefly of common salt, and the allied substance, potassium chloride. The yolk ash, on the other hand, is rich in lime and exceedingly rich in phosphoric acid.

Phosphate of lime being the chief constituent of bone, egg-yolk is a food peculiarly adapted to the formation of bone, and therefore an appropriate food for growing children. Excepting milk (which has over twice as much) no other food contains as large a proportion of lime in its ash.

In respect to phosphoric acid, egg-yolk stands at the head of the list, the proportion of this valuable mineral ingredient being more than twice as great in the ash of yolk as in that of milk. Egg-yolk contains, also, a notably large percentage of iron, and the iron is present in a form in which it is readily absorbed and utilized for the enrichment of the blood. Hence, eggs are good food for anæmic persons. Regarding their value as food for children, we cannot do better than quote Hutchinson's words: "The great richness of yolk of egg in fat, in lime salts, and in organic compounds of phosphorus and iron, make it a peculiarly valuable food for young infants, especially those who are suffering from rickets, for it is just those very compounds which a child needs, and a rickety child needs them most of all." (Hutchinson, "Food and Dietetics.")

Though rich in protein and fat, eggs, like meat, do not contain any of the other great class of organic food substances, viz., carbohydrates, but the protein and fat are present in eggs in a condition in which they are readily combined with food materials rich in carbohydrates, so as to form a properly-balanced ration. Among the food materials rich in carbohydrates are flour and other cereal products, rice, sago, tapioca, cornstarch, etc.

Both yolk and white flow readily, and are easily mixed into the batter of cake or pudding. Moreover, the white has the valuable property of being readily beaten into a froth to render cakes light or to form soft icings. This adaptability to a variety of treatments is one of the characteristics which render eggs so acceptable to the cook, who produces many delicious dishes owing their protein and fat largely to the eggs contained in them, but supplementing this protein and fat with such carbohydrates as sugar and the starch of flour, rice, sago, etc.

PREPARING POULTRY FOR EXHIBITION.

Mating for good results and fitting for the show-room is a very fitting pastime, which can be also made very profitable. I often think it a pity that farmers who show fowl at local shows don't put them out in better condition. Those same farmers would not think of taking a horse or cattle beast without fitting same, and although at a summer show the fowl are often in full moult, much can be done to make them look better. If your local show should be in the fall, the moult- ing can all be over with. If you pick your birds, and feed very light for, say, two weeks, on free range, then shut them up and feed very heavily on wheat, oats, a little barley, green food and beet scraps, besides a little flaxseed, you will soon see the feathers drop and new ones take their places. One of the very best feather-making foods is wheat and a plentiful supply of beef scraps. When you have done the best you can in this way, if your birds are a year or more old, choose all your young show stock and commence fitting. If they are white birds, give plenty of straw to keep them clean. Don't attempt washing unless you understand it, or your birds will look like the boiled shirt which a certain bachelor tried to wash. The day before the show is a good time to start getting the birds ready. Have a clean pen to put them in after you get through; take a small nail brush, after making some good suds, and proceed to wash the legs and feet first; stand the bird in the dish and soak well for a minute or two; then

go to work to scrub off the bird. Don't pick out a bird with scaly legs, but if you have a particularly good specimen with scaly legs, dip its legs in coal oil for two or three minutes about a week before the show. After washing the legs well, if you can spare the time, take a toothpick and pick out all the black from between the scales. This is very important if you wish to exhibit at a winter fair. Next take a piece of chamois or other soft leather and polish the legs well. Next, if the sickles or curved tail-feathers have a dragged appearance, wash them in warm soft water; when dried and fluffed out it will add wonderfully to a male's appearance. Take a piece of soft cloth, and wash the comb and wattles in warm soft water; use castile soap, and be careful not to rub too hard; then dry and apply a dressing of vaseline. If your birds are a white-lobed breed, and the weather has reddened them a little, get a little zinc ointment and rub well in. Sometimes you see a good specimen which has a beak growing too fast on one side, or a toe-nail growing too long or out of shape. Take a sharp pen-knife and trim carefully to the proper shape.

If you wish to prepare your birds for a winter show, it is important to begin right from the moulting season. Give abundance of shade, and the feathers will come in nice and dark, with a good lustre. Feed liberally, and don't forget to keep down the lice, for you cannot have a good plumage where lice abound; then, again, nothing looks worse than to see lice running ahead of the judge's hand, as he runs his hand through the feathers.

Remember that it isn't always the largest bird which wins at a show. I would sooner have a good-shaped specimen one-half pound under weight, than an extra-large bird off on shape. I think a great many breeders pay too much attention to comb on show birds. I have often had farmers remark, while looking over my drove of Tamworth pigs, that they didn't like that long nose. Well, probably it isn't a thing of beauty, but to me it is one of the least-important items, as we never eat the nose. So with show fowl, pick out your best-shaped bird first, then see that you are good on color, for a bird is judged on color in a great many different places. Then look to the comb and legs. Follow out these rules, and the other fellow must then produce a better bird to beat you.

H. E. WABY.

Manitoba.

APIARY.

ROBBING.

In most localities the bees have nothing to gather during, at least, the fore part of August. It is then that the apiarist must "look a little out" for robbing. After there has been one case of robbing, it is difficult to open any hive to perform necessary work without the bees becoming cross and making it hot for the operator.

When the nectar flow ceases, the bees will "nose" about to see if any colony can be over-powered and its stores carried away. The apiarist must, therefore, contract the entrances of weak colonies, and see that covers fit bee-tight, before the natural supply of stores has ceased. The bees of queenless colonies do not defend themselves well against robber bees; therefore, give queens, or unite them with colonies in possession of good queens.

In spite of precautions, some colonies may be found being robbed. The first thing I do is to pick grass or weeds and pile it against the entrance. This hinders more robbers from entering readily. Then I get water and wet the grass. Bees don't like to crawl through wet.

If the robbed colony is so weak numerically that it will not or can not defend its hive after the entrance has been piled up with grass, it must be given further assistance. Take it into the cellar or other cool, dark place. Of course, its entrance must be closed with wire-cloth, so the robber bees yet in the hive cannot come out, as they will do, even if it is dark. Another hive, the same in outside appearance, must be put where the robbed colony was. One or more frames containing a little honey should be put into it, so the robbers can finish the job. If this is not done, the sudden removal of all honey makes the robbers think they have "struck" the wrong hive. They will then pounce onto other near-by colonies, and, maybe, start another case of robbing.

If the bees of the colony in the cellar do not worry too much trying to get out, leave them in until the morning of the second day. Set them out early. The entrance should be contracted so only one or two bees can pass. If they are in possession of a laying queen, they will defend themselves all right now, with the contracted entrance.

Another thing, don't let the bees get a taste of honey outside the hives during a honey dearth. It makes them more inclined to rob.

F. A. STROHSCHNEIN.

Wis.

No Money Comes Easier

than Interest-money, when you have once made a start. One Dollar (or more) will open an Interest-bearing Savings Account at **The Bank of Toronto**, and you will quickly realize that this is the most profitable account you have, and your **money will be safe** at this Bank.

BANK OF TORONTO

Capital	\$ 4,000,000
Reserve Fund	4,500,000
Assets	37,000,000

MARKETS.

TORONTO.

The total receipts of live stock for the week ending July 31st were 272 cars, consisting of: Cattle, 3,495; hogs, 4,124; sheep, 4,675; calves, 520; horses, 86.

The quality of the cattle generally was common to medium, not many choice, well-finished loads, but better at the Union yards than the city.

Trade was better for exporters, but dull for the bulk of the butchers', which sold at lower prices.

At West Toronto, on August 3rd, receipts of cattle were 1,392; exporters 10 cents per cwt. lower. Steers, \$4.90 to \$5.50; bulls, \$3.75 to \$4.50; butchers', about 10 cents per cwt. lower than at this market a week ago; prime steers and heifers, \$4.90; good, \$4.40 to \$4.75; medium, \$4 to \$4.30; common, \$3.75 to \$4; cows, \$2.50 to \$3.85; canners, \$1 to \$2; milkers, \$35 to \$65 each; calves, \$3 to \$5.75 per cwt. Export sheep, \$3.75 to \$4.10; lambs, \$5 to \$6 per cwt. Hogs, \$6.90, fed and watered at market; \$6.65 at country points, f. o. b. cars.

Exporters.—Export steers sold last week from \$4.90 to \$5.67, but only two loads brought the latter price. Export bulls sold at \$3.75 to \$4.75, with two or three of extra quality at \$5 to \$5.25; export cows, \$4 to \$4.25.

Butchers'.—The average price for prime picked lots was from \$4.90 to \$5; loads of good, \$4.50 to \$4.80; medium, \$4 to \$4.30; common, \$3.50 to \$3.75; cows, \$2.50 to \$3.50; canners, \$1 to \$1.50.

Stockers and Feeders.—Only a limited number were on sale, but plenty for the demand. Stockers, 500 to 700 lbs. each, sold at \$2.50 to \$3; feeders, 800 to 900 lbs., at \$3.25 to \$3.75 per cwt.

Milkers and Springers.—There was a fair supply of medium to good cows, which sold at \$35 to \$60 each, and one choice milker brought \$65.

Veal Calves.—Trade in veal calves was not as brisk, owing to larger receipts of lambs. Calves sold at \$3 to \$6 per cwt.

Sheep and lambs.—Export sheep were firmer at \$3.75 to \$3.90 per cwt.; rams, \$3 to \$3.25; lambs were more plentiful and sold at \$5 to \$6 per cwt.

Hogs.—Packers quoted \$6.80 at the Junction, and \$6.90 at the city for selects, fed and watered. Drivers reported \$6.75 to \$6.90 at many points in the country, f. o. b. cars. The bulk of the hogs delivered at the city would cost from \$6.90 to \$7, fed and watered.

Horses.—At the Union Horse Exchange, J. Herbert Smith, manager, reports a very quiet trade, with a limited number offered. Drafters sold at from \$175 to \$220; general purpose horses, \$150 to \$190; expressers, \$140 to \$190; drivers, \$130 to \$200; serviceably sound, \$30 to \$75.

BREADSTUFFS.

Wheat.—No. 2 white winter, 85½c; No.

2 red, 85½c; No. 2 mixed, 85½c, all wheat quotations at outside points; Manitoba—No. 1 northern, \$1.10½; No. 2 northern, \$1.07½; No. 3 northern, \$1.06½; at Georgian Bay ports.
Rye.—None offered, nominal, at 85c.
Peas.—No. 2, buyers at 90c.
Oats.—No. 2 white, 44c to 46c.
Corn.—No. 3 yellow, 82½c to 83c.
Barley.—No. 2, 58c to 60c; No. 3 X, 55c to 57c, at outside points.
Bran.—Car lots, in bulk, \$18.
Shorts.—Scarce, at \$21.
Flour.—Ontario, 90 per cent. patent, \$3.25 for export; Manitoba patent, special brands, \$6; second patents, \$5.40; strong bakers', \$5.30.

COUNTRY PRODUCE.

Butter.—The market is stronger. Many dealers made money last year by putting butter in cold storage, and are repeating last year's tactics. Whether they will be as successful is an open question. Then, the demand for export is strong also, which has caused prices to go still higher. Creamery pound rolls, 25c to 26c; separator dairy, 23c to 24c; store lots, 21c to 22c.

Eggs.—Market firmer, on account of light supplies, selling at 21c to 22c.

Honey.—Liberal supplies of new honey are being offered. One commission dealer bought two tons at 8½c per lb., which was of choice quality. Dealers quote from 9c to 10c for No. 1 extracted. Combs are not quoted. The prospects at present are for a fair supply of choice honey at reasonable prices this season.

Cheese.—The market is firmer in sympathy with butter. Large are quoted at 13c to 13½c; twins, 13½c.

Potatoes.—New potatoes of Canadian growth are selling by the load from farmers' and gardeners' wagons at 90c to \$1.20 per bushel.

Poultry.—Receipts light, but plenty for the demand. Spring chickens, 18c to 20c per lb., alive; spring ducks, 11c to 13c per lb., alive, and plentiful.

Beans.—Prices are quoted firm and unchanged, but dealers report a good crop and expect prices to drop at an early date. Hand picked, \$2.10 to \$2.20; primes, \$2 to \$2.10.

Hay.—Baled, old, No. 1, car lots, f. o. b. cars at Toronto, \$12; No. 2, almost unobtainable, at \$9 to \$10; new is quoted at \$8.50 to \$9.

Straw.—Baled, slow sale, at \$6.50 to \$7 for car lots, on track, at Toronto.

HIDES AND WOOL.

The E. T. Carter Company, 85 East Front street, Toronto, wholesale dealers, report paying the following prices: No. 1 inspected steers, 60 lbs. and upwards, 9c; No. 2 inspected steers, 60 lbs. and upwards, 8c; No. 1 inspected cows, 7½c; country hides, cured, 7½c to 8c; calf skins, city, 12c; calf skins, country, 10c to 12c; horse hides, No. 1, \$2.50; horse hair, per lb., 28c; tallow, per lb., 5c to 6c; sheep skins, 90c; wool, unwashed, 8c; wool, washed, 13c to 14c.

FRUIT MARKET.

Red currants, red raspberries and red cherries have been plentiful, but are nearly done, but other fruits of the season are coming forward, and prices are quoted as follows: Raspberries, per box, 10c to 12c; cherries, cooking, basket, 80c to \$1.20; gooseberries, 75c to \$1 basket; black raspberries, 12½c; blueberries, 80c to \$1; Lawton berries, 8c to 10c per box; Canadian peaches, 75c to \$1 per basket; beans, 20c per basket; peppers, green, 25c to 35c per basket; apples, 25c to 35c per basket; Canadian plums, 75c to \$1 per basket.

CHICAGO.

Cattle.—Steers, \$5 to \$8; cows, \$3.40 to \$5.25; heifers, \$3.50 to \$6.25; bulls, \$3 to \$5; stockers and feeders, \$3 to \$4.65. Hogs.—Choice heavy shipping, \$6.95 to \$7.07½; light mixed, \$6.50 to \$6.80; butchers', \$6.90 to \$7.05; choice light, \$6.80 to \$7; packing, \$5.75 to \$6.85; pigs, \$4.50 to \$6.25. Sheep and lambs.—Sheep, \$3.50 to \$4.50; lambs, \$4.75 to \$7; yearlings, \$4.35 to \$5.25.

BUFFALO.

Cattle.—Prime steers, \$6 to \$6.70. Hogs.—Heavy and mixed, \$7.20 to \$7.30; Yorkers, \$6.75; to \$7.25; roughs, \$4.50 to \$6; dairies, \$6.75 to \$7.50. Sheep and lambs.—Sheep active; good lambs, fairly active; unchanged.

MONTREAL.

Live Stock.—The local market showed no actual change as compared with a week ago, although the tone was generally strong last week, owing principally to light receipts. The best beef offerings sold at 5½c, the bulk of the sales being made at 5c to 5¼c; medium ranged from 4c to 5c, and inferior down to 2½c. The market for sheep is still strong, and prices have advanced ¼c further, owing to limited supplies and an increased demand from exporters. Choice stock sold at 4c and culls at 3½c. Lambs were in good demand, at \$3 to \$5.50 each. Some sales have been made for future delivery at 7c a lb. Calves were scarce and firm, at \$4 to \$8 for good stock, choice being as high as \$12 each. Hogs continue scarce and prices steady. A number of packing concerns were reported to have contracted for a Manitoba house at a fraction less than the prices for Western Ontario stock. Selects sold here at 7½c to 7¾c, some rough stock being reported as low as 6½c a lb.

Horses.—There was nothing new in the market last week, demand being, if anything, duller than before. Prices were: Heavy draft, weighing 1,500 to 1,700 lbs., each, \$250 to \$300; light draft, weighing 1,400 to 1,500 lbs., \$225 to \$275 each; good blocks, 1,300 to 1,400 lbs., \$200 to \$225 each; express horses, \$150 to \$200; common plugs, \$50 to \$75 each, and choice carriage and saddle animals, \$300 to \$500 each.

Dressed Hogs.—Owing to the steadiness in the market for live hogs, dressed hogs showed no change in price last week. Fresh killed, abattoir-dressed stock, selects brought 10c to 10½c a pound. Cured meats were in very good demand, but lard was moving slowly.

Potatoes.—Supplies of old stock potatoes are now completely exhausted, and if they were not there would not be sale for them, as receipts of new stock are now increasing and prices are rapidly declining. The recent rains have benefited the crop considerably, and it is now hoped that it will be larger than it was thought a short time ago. Purchases have been made at \$1.37 for bags of 80 lbs., or about \$3 per bbl. of 180 lbs.

Eggs.—The market continues to advance slowly from week to week as production falls off and the stock becomes inferior in quality. Dealers are now compelled to pay about 19c per dozen, f. o. b. country points, and these cannot be sold here much under 19½c or 20c. For No. 1 candled, 20c was realized, while selects were selling at 24c. Demand was fairly active.

Butter.—The market was, if anything, easier than a week ago, prices having declined a small fraction in the country, where 23½c to 24½c was paid for finest Townships. Although this could not be sold at less than 24½c here to give a profit, it is doubtful if anyone would pay more than 24c. In fact, sales for export have been made at that figure. Higher-salted stock was selling in a jobbing way at 24c also, and single packages at 25c. Exports for the week ending 25th inst. showed a very considerable reduction, being but 2,600 packages, as against 11,000 for the corresponding week of last year.

Cheese.—Exports for the week ending the 25th inst. were 76,000 packages, which was a reduction of about 30 per cent., as compared with the corresponding week of last year. Total shipments this year are now 683,000 packages, as against 818,000 for the corresponding period of last year. Holders were asking 12½c to 12¾c for Easterns, and as high as 12¾c for Westerns, and it would seem as if the export trade was prepared to pay these figures.

Grain.—Demand for Manitoba wheat fell off during the week, but oats continued very firm, and some large sales were made for local and outside consumption. Prices were higher than two weeks ago, being 48c for No. 2 Manitoba, 47c for No. 3, and 46c for rejected, car loads in store.

Hay.—Prices continue firm, but practically unchanged. No. 1 timothy was steady, at \$12 to \$13 a ton. No. 2 had a wide range, owing to the differences in quality, prices being from \$9.50 to \$11, clover mixture being \$8.50 to \$9, and clover \$7 to \$7.50, in car lots.

Flour.—Manitoba spring wheat patents were quoted at \$6.10 per bbl., in bags, seconds being \$5.50. Ontario winter

wheat flour, \$5 for patents and \$4.50 for straight rollers.

Hides.—Dealers report prices steady. Demand continues to improve. Beef hides were 5½c, 6½c and 7½c per lb., for Nos. 3, 2 and 1 hides, lamb skins being 20c to 25c each. Calf skins are 11c and 13c per lb. for Nos. 2 and 1, respectively, horse hides being \$2 each for No. 1, and \$1.50 for No. 2. Rough tallow is 1½c to 3½c per lb., and rendered 5½c.

CHEESE BOARD PRICES.

Iroquois, Ont., all sold at 12 1-16c. Napanee, 12 1-6. Picton, highest bid, 12½c; all sold. Listowel, all sold at 12c. Ottawa, all sold at 12 3-16c. Victoriaville, Que., sold at 12c, 12½c and 12¾c. Perth, all sold at from 12c to 12½c.

Cheese sold at from 12c to 12½c, a pound on various other Ontario boards on August 1st.

BRITISH CATTLE MARKET.

Liverpool.—States steers, 13½c to 14c; Canadian, 12½c to 13½c; hay-fed ranchers, 12c to 12½c; grass ranchers, 11½c to 12c; cows, 11c to 12c; bulls, 10½c to 11½c.

GOSSIP.

THE HIGHLAND SHOW.

At the Highland Society's Show at Aberdeen, in the Clydesdale class, the first award in aged stallions went to Baron o' Buchlyvie; second to Perfect Motion; third to Memento. In three-year-olds, Montgomery's Gartly Bonus, by Everlasting, was first, and Chattan Again second. In two-year-olds, Montgomery's Baron Hopetown was first, and in the yearling section a brown yearling (the Royal winner), shown by the same firm, was first and champion. The champion female was Mr. Kerr's two-year-old, Nerissa. In the Shorthorn class Geo. Campbell, Harthill, was first with Farrel Uxor, who was second at the Royal to Cheddington Malcolin (not shown at Aberdeen). Tarrel Uxor was supreme champion here. The female champion was the King's two-year-old, Marjorie, as at the Royal. The champion (male or female) in the Aberdeen-Angus class was Mr. Kerr's two-year-old, Elect of Ballindalloch, the Royal champion, Everlasting, being reserve. Further report may be looked for in next issue.

FAT MILK AND FAT MEAT.

Why should milk that contains much cream be accounted the best? Cream is only fat, and we do not rate the food value of meats solely by the amount of fat that they include. Dr. J. A. Gilbert, Portland, Oregon, writing in the Medical Record (New York) takes the view, this devotion to "rich" milk has no logical basis. In our earnest search after a fat milk, he says, we have probably gone too far. To quote from an editorial in The Hospital (London, Eng.), which notes Dr. Gilbert's opinion appreciatively:

"The milk which is richest in cream is not therefore the most nutritious, for the very simple reason that a rich milk is less easily digested and absorbed than a milk in which the fat percentage is low. As far as its other constituents are concerned, a milk poor in fat is as valuable a food as a milk rich in fat. The fat percentage, the popular standard by which milk is judged, is most variable, while the proportions of the albuminoids, sugars and salts vary but little in the different samples of milk. In other words, while the energy-producing and heat-giving qualities of the several kinds of milk may be great or little, the valuable proteid ingredients, which go to the building up of the tissues—the prime property of any food—remain very much the same in all varieties of cows' milk. Thus a "thin" milk is for all purposes, save for energy and heat production, as valuable a food as the so-called "rich" milk. Indeed, it not infrequently happens, as the experimental feeding of young growing animals has shown, that a thin milk may prove, in the long run, more flesh-forming than a rich milk, inasmuch as the former is less liable to induce gastro-enteric disorders."



Life, Literature and Education.

[Contributions on all subjects of popular interest are always welcome in this Department.]

A TRIP TO THE CHAMPLAIN TERCENTENARY CELEBRATION AT QUEBEC.

"I have travelled much in Concord"—
Thoreau.

I have always prided myself on possessing to a strong degree the happy faculty of being able to "travel much in Concord." In other words, I have always maintained, and trust I always shall, that one can spend a lifetime within a very small compass, seeing, every day, if he will, something new, something interesting. It is only necessary to make a study of the small things to see, instead of being blind to the never-ending wonders that the all-mother, old Nature herself, spreads before us. Nevertheless, when the chance came of making my first really and truly considerable trip, viz., of going, in the interests of "The Farmer's Advocate," to the Quebec "Tercentenary," with a side-trip up the beautiful Saguenay, I was none the less ready to acknowledge that, if opportunity offers, it is wise to travel farther than "Concord."

The next thing was to find company—for the specimen of woman-kind who is willing to go, on a long trip, at least, "a maiden withering on a single stalk," would be hard indeed to find. Of course, everybody "wanted" to go to the Tercentenary, and many, in the way of women, half-decided; but, wirra-wirra! the tales we heard of that Tercentenary! All the rooms had been taken for "months before," at from \$5.00 to \$10.00 per day. Hacks had been engaged for long enough at \$40.00 per day. One suite of rooms in the Chateau Frontenac had been rented at \$150.00 a day!!! Needless to say, this last bit of information was the cause of much perturbation to us.

However, you usually find that things straighten out somehow. We haven't reached Quebec yet; I am writing this, at the present moment, on board steamer, on the Occidental side of Kingston, somewhere; but we are going forward in the serene consciousness of having secured board and lodgings at the very moderate rate of \$3.00 per day.

At last I did find someone who was really going. I shall call her Trixy, and must tell you that she is sitting beside me at this blessed minute, placidly working a centerpiece. The reason why she is contented to work centerpieces on such a trip will appear later. It's really funny—if it weren't so ludicrously pathetic—but I mustn't anticipate.

If ever you go on a knockabout journey, don't make the mistake of taking too much luggage. I had been advised, so decided to start out with one brown suit, two white waists, and a raincoat for "top"—just enough to be no especial care; no jewelry—for there were to be pick-

poets) at the Tercentenary—in fact, my wardrobe was to be mostly minus. The first time I interviewed Trixy, she stated that she was taking two blue suits, a linen suit, a muslin dress, and several shirtwaists. Then I "advised" her in turn, so she has appeared with a very modest suit-case. The wisdom of this lack of impedimenta we hope to find out when we reach Quebec.

"It will be beauty every inch of the way," an enthusiastic friend who had been over the route before, declared before we started.

Well, to begin with, we set off from London in a rainstorm. Nevertheless, the way, for a few hours, proved interesting enough. It is a beautiful country that lies between London and Hamilton. For some miles of the way, a river—we supposed it was the Grand, but could not find out—hugs the track. Farther on begins the beautifully hilly country about Dundas, with its ravines, woods, and glimpses of water everywhere. In one spot we saw a sort of bluebell, as it seemed, growing thickly up the precipices by the track. The species, even as revealed by hurried glimpses from the train, was new to us, and we wished

take in every inch of the "beauty." Nothing but fog—blank, dense, adamantine fog! You couldn't see a thing ten rods from the boat!—and from Trixy the eternal question, "Aren't you enjoying the scenery?" We might have cried, but we laughed. . . . On went the Belleville, but at a snail's pace. On hearing the gap, through which steamers pass into Toronto Bay, it was necessary to throw out sounding lines every little while: then, with fog-horns booming, and steamers shrieking on every hand, we were fairly into the harbor. A glimpse of the exhibition grounds and buildings, gleaming spectral through the mist, with one dome sparkling fairylike above a jumble of chimneys, more bellowsings of steamers, and we drew slowly in to the slip at the foot of Yonge St.

A jaunt up-town—to Eaton's, of course—then off again at 7.30 p. m. More fog, more fog-horns, more steamers booming at every turn, our own shrieking at intervals of a minute! 8.30—fog, fog-horns, whistling! 9.30—fog! fog! fog! To sleep. Ah—I am truly of "The Farmer's Advocate"—for all night long I wrestled with the conviction that the "Belleville" whistle, boom-

along the adjacent shore; glimpses of islands, among which tugs and launches ply, everywhere—and, Hallelujah! the fog has lifted!!!!!!

Thursday night, July 23rd.—I am writing this on board the steamer "Quebec," to which we were transferred at Montreal. Since writing last, there has been a never-ending kaleidoscope of hill and wood, river and town, the latter snuggling down to the water's edge, so that we could obtain glimpses of them all through the night, through the open window of our stateroom—a beautiful trip, which I wish all the readers of "The Farmer's Advocate" might have shared.

Some time yesterday afternoon we passed Kingston, the "Sandhurst" of Canada, with its Martello towers, and its walled fort straggling over the top of a bare hill. There you thought of Champlain, of his painful journey when wounded in his mishap with the Iroquois, to the lake immediately north-west of this point, where he stayed for a goodly share of the long, dull winter. . . The vicissitudes of the fortifications at Kingston have been many. The first fort, built by the Count de Frontenac, and called Catarqui, was alternately seized by the French and English, and was finally destroyed by the English under Col. Bradstreet in 1758. The present structure grew up in its place, and was for its time an effective enough menace to intending intruders.

Passing Kingston, the steamer plows quickly into the Lake of 1,000 Islands. The islands actually number more than one thousand, and extend for over 50 miles along the river. It was dark when we passed the greater number of them, but we were not sorry, for we had a chance of seeing the illuminations which help to make the wealthy Americans who summer at this beautiful spot (especially at Alexandria Bay) feel that they have not been separated wholly from the glare and scintillation of New York. Imagine steaming through channel after channel for a distance of some miles, every foot of which is glittering from thousands upon thousands of lights placed in rows and crescents and towers among these fairylike abodes of the rich. At "1,000 Island House" the brilliance seemed to concentrate—a radiant sunburst to the scintillating chain of diamonds—for every line and angle of the immense hotel was literally ablaze with points and stars of electric-light.

At a little distance further we met two steamers, each throwing search-lights round and round over the glittering scene. At one point the light fell and was held for some minutes upon a merry party gathered among the trees before one of the magnificent summer homes. Instantly the girls of the party began to dance, throwing up their arms, swaying and tripping like the veritable nymphs of the woods, in the soft white radiance. You never saw anything more fairylike: the dark trees upon either hand lit up where the cone of brightness fell, until every leaf was visible; the dusky verandas, all lit with crimson balls, Japanese lanterns in the background; and over



View from Smoke Island in Canadian Channel.

to make a closer examination. Verily, one can "travel much in Concord."

At Hamilton we embarked on the Richelieu & Ontario Navigation Company's steamer, Belleville, upon which we had been so fortunate as to secure a lower berth. (This morning we found out that several, women included, had been obliged to sleep on seats in the cabin.) At twelve o'clock the steamer cast off and proceeded to steam out of the beautiful Burlington Bay. We could see the shore, sweeping in a perfect circle, as it seemed, with cottages and tents nestling by the water's edge, and a whole fleet of sail-boats anchored nearer town—then, the pathetic arrived!

"Down came the fog, the fog came down," as the old rhyme hath it—and, behold us, Trixy and me, sitting disconsolately on deck, prepared to

ing every moment above us, was a cow—a Holstein cow, stuck somewhere, and bawling in distress.

5.30 a. m.—Awake. Fog! 6.30 Up. Fog!! 7.30—Breakfast over, and out. Fog!!! We groan, but are consoled, for we nearly ran into a sail-boat in the night—but didn't.

In the meantime, why shouldn't Trixy work centerpieces? There is absolutely nothing else to do, nothing to see but that interminable vapor that parts to let us through, then "closes in behind," merciless, like the mysterious wind, which, though, "never a breeze up-blew," drove the Ancient Mariner on his way.

9.30 a. m., Wednesday, July 22nd.—We are just steaming out of Trenton, nearly three hours late. It is a beautiful spot, with a big, wooded hill in the background; trees, with white tents gleaming among them,

the grass the swaying damsels, in their graceful white gowns. You thought of *Midsummer Night's Dream*, of something you had seen on the stage, but so much poorer a stage than this—and then you were off again down the mighty St. Lawrence.

Past Prescott, with its historic windmill, in the night; and Morrisburg, near which the Battle of Crysler's Farm was fought; past Cornwall, and other manufacturing towns; then up at 4 o'clock in the morning to see the rapids of the Long Sault, whose turbulent billows, you remember, turned back Champlain's shallop on that first memorable voyage up the St. Lawrence, so that he was obliged to continue with the Indians by canoe. Well indeed might this rapid turn back so slender a craft, for it tossed our steamer up and down like a cork on its mad, seething surface. It was our first experience of a real rapid, and we waxed enthusiastic, quite oblivious, until later, of the spectral-looking figures in hastily-donned raincoats and veils which had emerged on deck, only to hasten back to bed again to await time for breakfast. It may be interesting to note that, with its machinery almost stopped, the steamer is hurried along this rapid at the rate of 20 miles an hour; also, that the first pilot who dared to guide a steamer down this perilous passage was the Indian, Terorhiahere.

I wish I could tell you in detail about all the interesting events of to-day's voyage; of the great Soulanges Canal, over twelve miles in length, with its locks, operated and lighted from end to end by electricity; of the beautiful spot where, at its entrance into Lake St. Louis, the Ottawa and St. Lawrence meet; of the first vision of the beautiful City of Montreal, its domes and spires gleaming in the sun, its great mountain—the old Mont Royale—rising like a rampart in the background, and wooded to its summit; of many other things, but space will not permit.

We took a hasty run up into the city—a strange city to us, with French signs everywhere; French words spoken on all sides, and priests almost anywhere to be seen in their long black robes; but we had only time to visit the fine gray-stone court house and city hall, the Bonsecours Market, and the great cathedral of Notre Dame, which Thoreau described as "a great cave in the midst of a city," when it was necessary to return to the boat.

This is a beautiful vessel, this "Quebec," which is hurrying us along as I write, and it is loaded from stem to stern with passengers, all bound for the great Tercentenary. When getting our tickets at the purser's office this evening, we were obliged to step into a line which seemed to take hours to dispose of. It was amusing to hear the remarks. One man behind me was especially impatient. First he grumbled that "they were making the tickets"; then he growled that a lady in black was "holding up the whole line," and then, after an enforced silence of several minutes, he gave voice to one expletive, uttered with all fervor, "Damnation!" Now, don't read that if you are easily shocked. But he really said it, and I am afraid I laughed. It was so abominably hot in that crowded line, in that stuffy "below" atmosphere, that, upon my word, an escape valve somewhere seemed pretty nearly necessary, and he spoke for the crowd.

We had a very "swell" dinner to-night—everything from caviare on toast, down—or up—and all the paraphernalia from a dozen, more or less, knives and forks at each cover, to silver finger-bowls. . . . To-morrow morning we shall be at the Mecca of tourists in North America at the present time—Quebec.

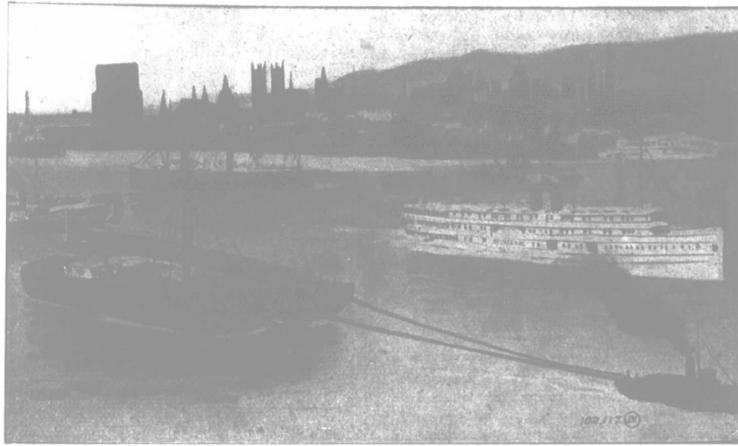
I suppose you will have read much of the great Tercentenary in the daily papers before you get this, but possibly you may not mind reading some more about it even later still, from the standpoint of two girls to whom many of the things in this big

world are yet fresh and interesting; in other words, from the standpoint of two wandering females who are green in a good many ways as yet in regard to the doings of big cities. At any rate, I shall anticipate your good-nature, and not fret because I cannot give you the whole story of the "Big Show"—as I heard an American from the Adirondacks calling it this afternoon—in the very first instalment.

At any rate, I can write no more now. We have just stopped at Sorel, and they are wheeling baggage or something in at a terrific rate. I hear the man in the next stateroom declaring that he "can't sleep in

before, has picked up a few English words, and these he delights to air when opportunity occurs.

I ask him, on discovering, without the use of my eyes or my ears, that some of his visitors have arrived, "Who is that? and that? and that?" "Him brudder of me," he replies, and grins as he sees me count my own fingers over and over again, by way of expressing that I might be counting them forever, and yet never come to the end of the boy's relations. His father, a petty chief, has fourteen or fifteen wives, so no wonder that Boxer in duplicate is perpetually turning up. Of course, the *raison d'être* of these



Montreal, from St. Helen's Island.

that infernal racket," and most certainly I can't write in it. . . . Now I hear him informing his wife that the boat "stops every hour all night, and makes more racket than that"—but I am afraid he is a "jollier." . . . It is 10 p. m., so au revoir until another week.

DAME DURDEN.

SOME NOTES FROM MY OLD LOG IN SOUTH AFRICA.

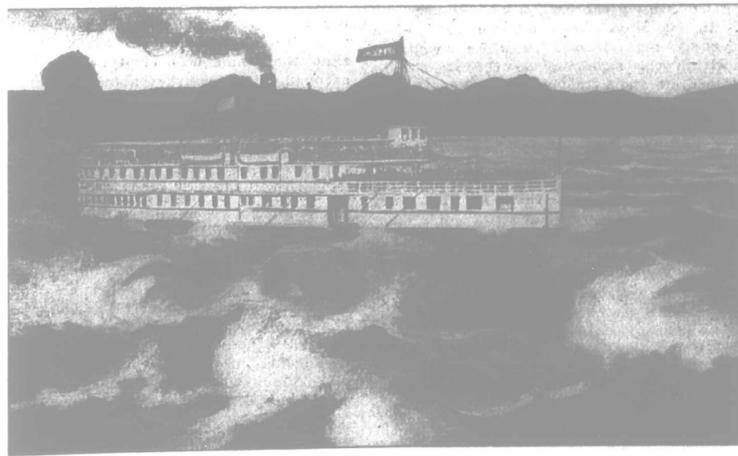
SOMETHING MORE ABOUT BOXER AND HIS SUCCESSORS.

IV.

The endless string of relations who visit Boxer—women with their babies, and a small fry of tiny runabouts of all ages, men full grown, and youths

visits is really the porridge-pot, rather than an overwhelming affection for the special member of the family who happens for the time being to own it; and to it all are made welcome, as a matter of course, one big wooden spoon sufficing for all needs, no cleansing ceremony being ever required as it passes from mouth to mouth. To scrape a vessel until it has yielded up its last atom, is the Kaffir idea of washing it, but, all the same, there is a Kaffir word which stands for washing. It is "soola," and now I will tell the story I promised, of how Boxer's successor, a smaller edition of him, and a better, "soola-ed" my frying-pan.

I was curious to see how the little dark-eyed laddie would do the job, and, peeping through the crack of



Steamer "Brockville" in the Long Sault Rapids, in St. Lawrence River.

in every stage of growth—have become quite a nuisance, and I am fast losing the mild courtesy and ready smile of welcome which have—though I say it as shouldn't—distinguished my greetings to them hitherto. I have even waved my hand to a whole row of them dismissively, uttering, in tones not to be misunderstood, in spite of a limping accent, "Hamba, hamba-taale," a kind of quick-march order which even a dog understands in South Africa.

Boxer, having been a house-boy

the door, thus was I rewarded for my pains.

"Oomfan"—literally, boy or youth—first of all, clicked with delight at spying a few, very few (for grease is a rare commodity in Kaffir-land), greasy leavings. These he chased round and round with his finger, licking it again and again as it returned to the point of departure, until no grease could apparently be seen. But there might be a vestige left, thought the boy, and "Oh! how nice for my wool." Upside

down went the pan, hat-fashion, on his pate, which he whirled like a mop therein, until I thought he must drop from sheer giddiness. He did nothing of the kind, and although, to his mind, no further cleansing could be needed, yet, just a finishing touch with the tail of his abbreviated little shirt (his sole garment) might give it a shine, and that should not be denied it; and then, with a parting sigh of regret, Oomfan hung the pan upon the nail appropriated to its use, where the ants soon swarmed over it in myriads, vainly believing that it was a feast spread for them.

One more story of Oomfan, and I must stop. The food problem, so far away from all sources of supply, was always a very difficult one; so, on taking possession of a somewhat larger hut than we had had to put up with hitherto, we started a small henhouse, and at first considered that half of our difficulties were surmounted. But South-African hens are sad gad-about, and wholly indifferent as to where they deposit their eggs. The supply failing, I locked the henhouse door, thinking to remedy the matter thus. Losing the key—a mishap not confined to country or climate—I applied to Oomfan in my difficulty. "What, dismayed by a trifle like that!" seemingly pooh-poohed he in voluble Kaffir. Darting to the henhouse, he laid himself down outside the little square hole built for the accommodation of the hens, elongating his body and compressing his bones by a "somehow" known only to himself, he wriggled through the hole and out again, with several unbroken eggs in the tail of his very grubby little shirt.

The years which have passed since my diary was penned must have wrought great changes in the Kaffir of South Africa, not only politically, but temperamentally. I doubt if it could now be recorded of him that his recovery from accidental wounds would be so speedy as to seem almost miraculous. I remember the mishap to a little lad who, whilst acting as forelooper, gashed his foot horribly with a hatchet. Out came our roll of bandages, with which our driver "plastered him up properly." As soon as the process was over the boy shuffled off on his barefooted tramp again, almost as if a new foot had been given him to make a fresh start with. I was told in Pietermaritzburg, of one whose head had been crushed by the falling of a stone in a quarry. The bone was cut away, and a silver plate put in. "The beggar will run away with it if I don't keep my eye upon him," said the doctor who had operated upon him. He walked off after all was over, and was well in a month. So much for a simple diet of mealy-meal porridge from year's end to year's end. Surely this meal—Indian corn ground—must have great life-restoring properties, when men of such caliber as the "noble savage" of South Africa are nourished into a vigorous manhood by it.

H. A. B.

H. A. B. VISITS AN ONTARIO FARM

While absent on my little holiday, I spent a delightful day on an Ontario farm, where I had most satisfactory proof that it is quite possible to be English, and yet lead a happy, prosperous life on a Canadian farm, notwithstanding some statements to the contrary. My friends were brothers, sons of an English rector. They had mastered every detail of farm life, and very seldom had any hired help whatever, the young wife of the married brother churning her butter, minding her poultry, etc., as deftly as if she had not been, not so very long ago, a young lady at boarding-school in the Old Land. As a native-born Englishwoman myself, I was proud to see such adaptability, and such perfect content with the land in which these younger folks had cast their lot; and it was pleasant to meet the good old "Farmer's Advocate" on their table as a household friend and adviser. H. A. B.

APPRECIATION FROM SOUTH AFRICA.

H. A. B. also encloses the following quotation from a letter recently received from a friend in England: "I think I must copy what Stephen says about 'The Farmer's Advocate,' in his letter of last Saturday: 'Thanks so much for 'The Farmer's Advocate.' I like it so much; it is a splendid paper, and, although applied to Canadian farming, very many useful hints can be found for South Africa.' So you see how much my son appreciates it."

The Quiet Hour.

THE WITNESS OF THE GRAVE-CLOTHES.

But Peter arose, and ran unto the tomb; and stooping and looking in, he seeth the linen clothes by themselves; and he departed to his home, wondering at that which was come to pass. S. Luke xxiv. 12 (R. V.).

The other disciple outran Peter, and came first to the tomb; and stooping and looking in, he seeth the linen clothes lying; yet entered he not in. Simon Peter therefore also cometh, following him, and entered into the tomb; and he beholdeth the linen clothes lying, and the napkin that was upon His head, not lying with the linen clothes, but rolled up in a place by itself. Then entered in therefore the other disciple also, which came first to the tomb, and he saw, and believed. For as yet they knew not the scripture that He must rise again from the dead. S. John xxiv. 4-10 (R. V.).

Ah! sure within him and without,
Could his dark wisdom find it out,
There must be answer to his doubt.
—Tennyson.

We live in a world of progress; even the unchanging truths of our glorious religion are seen from a new point of view by each generation of men, revealing beauty which was always there, though it was veiled before. As electricity was always in the world, with all its marvellous powers waiting for men to discover and use, so many great treasures have for ages been lying unnoticed in God's two great books—Nature and the Bible—revealing their mysteries in these latter days and coming upon us with all the freshness of new discoveries. Why should we fear the scientific study of God's Word? Christianity is a religion of facts as well as of spiritual truths, and microscopic inspection is continually bringing to light facts that have been overlooked, as witnesses to the truths which can be grasped by faith alone. God does not demand a credulous belief in unattested prodigies. The true definition of faith is not that of the small boy who said that faith was "believing things we know are not true." Faith does require us to believe things that are beyond the reach of reason, nevertheless reasoning faith is the only possible kind of faith for sane people. We believe thousands of things about this physical world which we cannot understand. Who can understand how the chicken is formed in an egg, how the blossoms on the trees turn to fruit, how the food we eat turns into flesh and blood, nerves, muscle, etc.? If we cannot understand the physical world, how much less likely is it that we should entirely comprehend things spiritual and transcendent.

I have just been reading a deeply-interesting book called "The Risen Master," by Rev. Henry Latham; and, as many of our readers may not have the opportunity of reading such books, I will try to pass on a few of the thoughts contained in it. Perhaps another week I may tell you about other things in the book, but to-day we will look only at one subject, "The Witness of the Grave-Clothes."

The disciples who hurried to the tomb after our Lord's Resurrection seem to have been tremendously impressed with the appearance of the linen clothes which

had been wound like bandages many times around the Body. For many centuries men have passed over with scanty attention the fact that the sacred record brings prominently into notice that apparently insignificant detail—the position of the grave-clothes, or "cloths" as the R. V. gives us the translation. Now, after-nearly 2,000 years, those swathing cloths suddenly take their place as they did that great Resurrection Day among the strongest proofs of the foundation Fact of Christianity. S. John, in telling his story of his visit to the tomb, declares emphatically that when he beheld those cloths he believed that Christ was risen. He could not imagine that friend or enemy had removed the Body and left the clothes behind, because their appearance showed that to be impossible. Those who have carefully studied the Greek account throw light on the mystery. The Body had been swathed in cloths, wound round and round like bandages, with a hundred pounds of myrrh and aloes strewn within the folds. These cloths were now "lying flat," without disarrangement, weighed down by the spices. They had not been unwound nor disarranged in any way. Our Lord's Body had mysteriously changed its nature, changing probably, as S. Paul expresses it, from a "natural" body to a "spiritual" body, and passing as easily as the air itself through the cloths, which immediately fell flat on the rocky slab. The napkin which had been twisted like a turban about his head, still kept its "twirled" shape—it was "wrapped together." It is also said to have been "in a place by itself." It was probably lying on a raised pillow-like slab where the head had rested, and was some distance from the rest of the cloths, for there is a considerable space between the wrappings of a corpse and the head-covering in many Eastern countries to-day. Often the face, neck and upper part of the shoulders remain uncovered. See how this fits in with various incidents of that Day. Mary Magdalene saw two angels sitting, "the one at the head and the other at the feet, where the body of Jesus had lain." The silent Sign of the Resurrection lay between these guards. No one could be allowed to disarrange that unmistakable testimony until its work was accomplished. S. Matthew speaks of an angel who sat outside on the stone and who said to the women, "Come, see the place where the Lord lay." He was evidently inviting them inside not to see only the negative witness of an empty tomb, but to be convinced by the positive witness of the grave-clothes. They were so deeply impressed by what they saw that they ran, with fear and "great joy," to tell the disciples. An empty tomb would not have instantly turned their terrible grief into "great joy."

In S. Mark's account we read of a young man dressed in white who sat within the sepulchre on the right side. He drew the attention of visitors to the mysterious witness of the cloths, saying, "Behold the place where they laid Him." It was not an empty space nor a pile of disarranged cloths and scattered spices that they saw, for such a sight would not have impressed them so that they "trembled and were amazed."

S. Luke says that when the women told their story to the apostles their words seemed to them as "idle tales, and they believed them not." They had no reason to question the good faith of the women, and, if they had only said that the Body was gone, the statement would not have seemed an incredible "idle tale." But people are seldom very willing to believe a seeming impossibility, and it did appear to be impossible to believe that the Body had gone, leaving the bandages untouched. This was a new thing in their experience, and we are always slow to believe new things, though in time we learn to believe in many apparent impossibilities—we don't disbelieve in the possibility of talking to people many miles away through a telephone, or sending a message by wireless telegraphy, though these common occurrences still appear to be impossible.

This was new, though the disciples knew that a resurrection from the dead was not new. Lazarus had come out alive from the tomb, but he was bound hand and foot with grave-clothes. This Resurrection was evidently entirely different in nature. The body of Lazarus was restored to the former condition of natural life, while Christ's Body was no

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Free tickets from Winnipeg to points where farm laborers are needed, within certain limits.

Return for additional \$18.00 after at least 30 days work

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From all stations, Toronto to Sarnia line and south thereof (in Canada).

IMPORTANT

Ask C.P.R. Ticket Agent for time of special train on August 19th. If no agent convenient write to:—

C. B. FOSTER, Dist. Pass. Agt., C.P.R., Toronto

longer a natural Body, but had become a spiritual Body. It was completely under the control of His will. He appeared or disappeared at will, passed through closed doors, appeared "in another form," when He did not choose to be recognized, and yet could draw attention to the unmistakable marks of His identity in hands and feet and side. When the disciples were afraid, thinking that they saw a "spirit," He invited them to "handle" Him and see that He had substance and form. A spiritual body is something outside our experience, is it strange that we are puzzled by the description? But let us return to the witness of the grave-clothes. That Easter afternoon two of the disciples were joined by Christ as they walked to Emmaus. They did not recognize Him, but told Him how some of their friends, who did not believe the story of the women, went to the sepulchre and "found it even so as the women had said." If they only meant to state that the tomb was empty it was strange that they should use such a roundabout expression, which is far more positive than negative. Besides, they would hardly have seemed so astonished at finding that the tale of the women was true, if it had only been the statement that the tomb was empty. But such astounding information about the grave-clothes would certainly not be unquestioningly accepted. No one but Mary seems to have imagined that the Body had been "taken away," though that would have been the natural explanation of an empty tomb. Mary probably failed to notice anything remarkable in the position of the grave-clothes on her first visit, because it would not be noticeable in the dim light of dawn. When she slowly returned, after running with her heartbroken message to S. Peter and S. John, she was blinded by tears and not likely to notice anything. The Evangelists do not go out of their way to explain why she was so despairing, while the other women were filled with "great joy." They seldom go out of their way to explain anything, being occupied with the telling of facts. There was reason enough, if Mary thought her Lord was dead and even the Body had been swept out of her reach, while the other women knew that He had risen with new life.

It is suggested that the witness of the grave-clothes was probably one great reason for the rapid increase in the number of converts from 120 to 3,000 the Day of Pentecost, and soon after to 5,000. The wonderful news of the Resurrection would soon spread through Jerusalem, which was always crowded at the Passover. Many would visit the tomb and see the mysterious empty wrappings, and others would hear about them. The news would be carried by returning pilgrims to their homes, and

so men would be prepared to believe in the foundation Fact of Christianity—the Resurrection of Christ.

And what shall I say about ourselves? A man who will venture to say that anything is impossible, in these days of marvellous discoveries, is showing a most unscientific form of mind; and, unless we take that obstinately foolish position and deny the possibility of the Resurrection, we must own that critical examination of the various records of that Event show that it was not a fabrication. Such undesigned coincidences, fitting perfectly into each other—coincidences that have passed unobserved for centuries, or at least have attracted very little attention—prove to any unprejudiced student that they are not invented. The writers were evidently telling their story in good faith. And it is a great help to us to know that the evidence for Christ's triumph over death gains instead of loses by closest scrutiny. Those who are like S. Thomas, doubting, though they wish to believe, need not fear to seek for proof. God does not force our belief, and yet He provides "many infallible proofs" for those who are earnestly seeking for them. The promise that those who seek shall "find" can be depended on. Those who do not take the trouble to "seek" can hardly expect to "find."

"Blind unbelief is sure to err
And scan His work in vain:
God is His own Interpreter,
And He will make it plain."

HOPE.

OLD MOTHERS.

I love old mothers—mothers with white hair,
And kindly eyes, and lips grown softly sweet
With murmured blessings over sleeping babes.
There is a something in their quiet grace
That speaks the calm of Sabbath afternoons;
A knowledge in their deep, unflinching eyes
That far outreaches all philosophy.
Time, with caressing touch, about them weaves
The silver-threaded fairy-shawl of age,
While all the echoes of forgotten songs,
Seen joined to lend a sweetness to their speech.
Old mothers—as they pass with slow-timed step,
Their trembling hands cling gently to
Their strength;
Sweet mothers—as they pass, one sees
The garden-walks, old roses, and old
Lilies.
—Charles S. Ross, in the Century Magazine.

"THE FARMER'S ADVOCATE" FASHIONS.



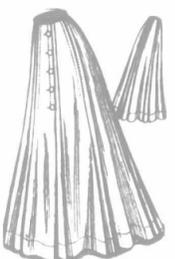
6049 Girl's Semi-Princess Over Dress, 6 to 12 years.



6058 Boy's Russian Blouse, 6 to 12 years.



6061 Tucked Blouse, 32 to 42 bust.



6060 Seven Gored Skirt, 22 to 30 waist.

The above patterns will be sent to any subscriber at the very low price of ten cents per pattern. Be careful to give correct Number and Size of Patterns wanted. When the Pattern is Bust Measure, you need only mark 32, 34, 36, or whatever it may be. When Waist Measure, 22, 24, 26, or whatever it may be. When Misses' or Child's pattern, write only the figure representing the age. Allow from one to two weeks in which to fill order, and where two numbers appear, as for waist and skirt, enclose ten cents for each number. If only one number appears, ten cents will be sufficient.

Address: "Fashion Department," "The Farmer's Advocate," London, Ont.

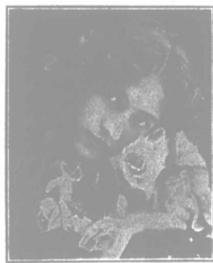
Mrs. Whoopier—You tell me, Herr Vogleschnitzel, that my daughter can never become a singer! Is there no hope for her?

Herr Vogleschnitzel—Vell, matam, you might put her on a diet of canary seed aretty, undt see vat dot vil do mit her.

"Be ruled by Time -the wisest counselor of all"
Paraphrased this saying might read
 Be ruled by
ELGIN
 TIME
 the truest time of all

Every Elgin Watch is fully guaranteed. All jewelers have Elgin Watches. An interesting, illustrated booklet about watches, sent free on request to
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Every woman with a growth of hair on her face realizes with pain how terribly big those hairs become when she views them in her mirror. There is positively no home treatment for

SUPERFLUOUS HAIR.

It can only be permanently removed by electrolysis. Our method is antiseptic, and we assure satisfaction. Ladies living out of town requiring work done should come during the Exposition (Aug. 29 - Sept. 14) for treatment. Write now for free book on the work.

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 Established 1892.

Farm Properties Wanted.

Parties having farms for sale may send particulars of same to the Provincial Bureau of Colonization for the information of prospective buyers from Great Britain and elsewhere. The Bureau will not act as a broker for the sale of properties, but will direct buyers to the owner or agent of the property.

THOS. SOUTHWORTH.
 Director of Colonization.
HON. NELSON MONTEITH.
 Minister of Agriculture.

CENTRAL BUSINESS COLLEGE, TORONTO.

The largest and best-equipped school of its kind invites you to write for its New Catalogue. Fall Term from Sept. 1. Address: W. H. Shaw, President, or E. R. Shaw, Secretary.

SPECIAL NOTICE TO FARMERS' DAUGHTERS

We will open fall season by teaching our personal course in dressmaking at school in Stratford. Class commencing Sept. 1st, taking four days to teach full course, pupils arriving in Stratford Aug. 31st. To all attending this class we will pay return railroad fare within one hundred miles of Stratford, also provide lodgings at school free of charge. Our course teaches how to cut, fit and put together any garment, from the plainest shirt waist suit to the most elaborate dress. We have been in business ten years, taught over eight thousand pupils and guarantee to give five hundred dollars to anyone we cannot teach. All wishing to take this personal course must send in their address not later than Aug. 27th. If not able to attend this class, take a course by mail in your spare time at home. For particulars address
SANDERS' DRESS-CUTTING SCHOOL,
 31 Erie St., Stratford, Ontario, Canada.

STRONG TESTIMONY

Backed by the Test of Time Given Carey's Roofing.

"I believe we were the first to use Carey's Roofing in Youngstown, O.," W. E. Baldwin wrote the Philip Carey Co. last April. "We were unable to procure it from agents at that time, and bought it direct from you in 1887. We put it on our three-story business building, and after twenty-one years of service we have never had a leak, and the roof in its appearance looks as well to-day as it did the day we put it on."

Doesn't that sound good? And yet Mr. Baldwin's roof is in the infancy of its usefulness, for a Carey roof lasts as long as the building stands.

Progressive farmers are learning (some from sad experience) that in buying roofing, it doesn't pay to figure on first cost. A "cheap" roof means a leaky roof every time—an expensive "white elephant" on your hands as long as it lasts.

Carey's is a one Standard Roofing. It is the national roofing, best alike where sun shines hottest or winters are coldest. Enough testimonials—voluntary tributes to the enduring worth of Carey's Roofing—have been written to fill a book as big as a dictionary. All that is claimed for a Carey roof has been verified by actual experiences. Farmer John Hunn, of Wyoming, Del., after ten years of satisfaction with Carey's Roofing, writes: "As far as I can see, the roof is good for twenty years longer."

Carey's Roofing is made of Carey's special-process Asphalt Cement, with the best woolen felt as a base and East India burlap imbedded in the upper surface of the cement—all compressed into flexible sheets. The Carey Patent Lap completely covers and protects nail heads.

Carey's Roofing ranks in value with an insurance policy. After the great Baltimore fire, City Inspector Louis S. Wilson wrote officially: "Burning embers seem to have no effect whatever on Carey roofs. Buildings covered with this roofing, directly in the path of the fire, are in no way in need of repair."

Write The Philip Carey Co. direct, and they will send free booklet, sample, testimonials, prices and information how to get their roofing. Address: The Philip Carey Mfg. Co., Toronto and Montreal.



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

FOR SALE—Two very choice litters of Scotch Collies—sable and white—excellent pedigrees. Prices reasonable. If you want a dog that will work write: J. E. Pearce, Wallacetown, Ont.

WANTED, at Mt. Elgin Institute, a man to assist on the farm. Must be good with horses and dairy cattle. Users of profane language, tobacco or alcoholic liquors not wanted. Also a woman to take charge of officers' quarters, dining-rooms and kitchen. Permanent positions to the right persons. State age, religious persuasion, experience. Rev. T. T. George, Principal, Muncey, Ont.

POWER LOT

A Story of "Down East."

BY SARAH McLEAN GREENE.

[Rights of publication secured by the Wm. Weld Co., Limited, London, Ont.]

CHAPTER XIV.—Continued.

Mary came to the door as we drove up, and it went to my heart like cold ashes, the job of bringing that fine old fellow there, to confab and talk high-fown language along o' her. My sympathies just fairly gushed out all of a sudden, toward poor Rob Hilton, beating away at his work in the potato field. "He used to be teasing me to sail him over to Waldeck," thought I to myself. "Well, he shall go to Waldeck, and have a good time, too, and I'll keep company with him as merry as he likes—consistent with keeping out of the rum-fiend's clutches."

I got rid of Doctor Margate as brusquely as I could at Mary's door, and acknowledged her smile of greeting with a short nod. Then I went over to Captain Byjo's and deposited the great man's heavy valise, like any truckman; and coming out, I stopped in the field where Rob was.

He lifted up his head, and bit his lip; and—yes—there were the cruellest kind of tears in his strained eyes—the unshed kind; he couldn't seem to speak; his mouth quivered.

"Hello, old man," said I, and I could not help putting an arm along his shoulder. I'd never been familiar with him, but I felt familiar with him, then and forever. "Bear up," says I, "you and I got to bear up, an' steer right on. I know the tune, same as you," says I, "but the seas ain't goin' to swaller us; we'll beat the seas. We got to steer right on," says I. "I'm goin' to, an' you're as much of a man as I am, any day."

"You don't think that," says he; and being all of a sudden familiar with him forever and forever, I read his soul.

"I do mean it," says I. "Don't you give me the lie! If ever a man was made able to steer right on, it's you, Rob Hilton. If you don't know it yet, I know it, by all that's holy! Come, let's shake."

"All right," says he; and it may be a big word, considerin' the occasion, but I felt immortal strength along o' the heartbreak in the grip o' the poor boy's hand.

"Now, look here," says I; "say, when your first batch o' potatoes is ready to dig, what do you say to a sail with me over to Waldeck? I know somebody there that'll give you a fancy price for them. We'll load 'em on to the boat, and if you will help me a little with some other truck I've promised to take over, the business shan't cost you a penny, and I'll be glad of your company."

"You said once," said Rob, with a streak of sunshine on his face, "when I asked you to take me over—that you 'chose your own company'."

"Ain't I choosin' my own company?" said I. "I'd rather have you sail with me—honest, Rob—than any other man I ever met anywheres, not exceptin' Power Lot, God Help Us."

Any other man. I did not know then that Rob had heard Mary Stingaree that moonlight evening, when she said slightlying that he "was not a man at all." I did not know why in thunder such a high light blazed from his face at my words. A sail to Waldeck to sell potatoes wouldn't seem much of an ambition to anyone who had once possessed what Rob Hilton was born heir to. But there, thought I, he's been shut off here so long, the prospect of the sail is like wine to him.

His shoulders were set mighty square, considering what seemed the childishness of his emotion, and the way he gripped my hand proved that the old salt ham he'd played with

HIGHLY IMPORTANT SALES OF

Pedigree Border Leicester Sheep, Clydesdale Horses, and Aberdeen-Angus and Short-horn Cattle.

Border Leicester Sheep. BARRELWELL LEICESTERS.

WEDNESDAY 2nd September next, at Barrelwell, Brechin, Dispersion Sale of the World-renowned Flock of Border Leicester Sheep belonging to the representatives of the late David Hume, Esq., J. P., numbering 446 head.

ARABELLA AND ROSEHAUGH LEICESTERS.

FRIDAY, 4th September next, at Inverness Auction Market, Inverness, Dispersion Sale of the entire flock of Highly-bred Leicester Sheep, belonging to James A. Gordon, Esq., of Arabella, and also the entire Flock of Highly-bred Leicester Sheep belonging to J. Douglas Fletcher, Esq., of Rosehaugh.

Pedigree Clydesdale Horses.

MONDAY, 14th September next, at Perth Auction Market, Perth, Annual Select Sale of High-class Pedigree Clydesdale Mares, Fillies, Foals, and Entire Colts, including a select consignment of 12 from J. Ernest Kerr, Esq., of Harviestoun Castle.

Pedigree Aberdeen-Angus Cattle.

TUESDAY, 15th September next, at Mains of Fordie, Perthshire, Sale of a Chocely-bred lot of Pedigree Aberdeen-Angus Cattle, belonging to Mr. Robertson.

WEDNESDAY, 16th September next, at Ballindalloch Castle, Ballindalloch, Sale of a Large and Select Portion of the World-renowned Herd of Aberdeen-Angus Cattle belonging to Sir John Macpherson Grant, Bart., of Ballindalloch.

THURSDAY, 17th September next, at Mulben Mains, Mulben, Sale of a very choice portion of the Celebrated Herd of Aberdeen-Angus Cattle belonging to Mr. Macpherson.

FRIDAY, 18th September next, at Wardends, Banff, Joint Sale of Chocely-bred Aberdeen-Angus Cattle, belonging to Mr. St. Clair Simpson and other noted breeders.

WEDNESDAY, 23rd September next, at Myze Farm, West Wycombe, Buckinghamshire, Dispersion Sale of the Chocely-bred Herd of Aberdeen-Angus Cattle belonging to Sir Robert Dashwood, Bart.

THURSDAY, 24th September next, at Wyrley Grove, Pelsall, Staffs, Dispersion Sale of the Celebrated Herd of Aberdeen-Angus Cattle belonging to Mrs. Macpherson, of Wyrley Grove.

Pedigree Shorthorn Cattle.

SATURDAY, 10th October next, at Barrelwell, Brechin, Dispersion Sale of the Renowned Herd of Shorthorn Cattle, numbering 60 head, belonging to the representatives of the late David Hume, Esq., J. P., Barrelwell, Brechin.

MONDAY, 12th October next, at Perth Auction Market, Perth, Select Joint Sale of High-class Pedigree Shorthorns, from famed Breeders in Perthshire and Midland and Southern Counties.

TUESDAY, 13th October next, at Tillycairn, Oldmeldrum, Sale of this year's crop of Shorthorn Bull Calves from the World-renowned Herds belonging to Mr. William Duthie, Collynie, and Mr. John Marr, Uppermill.

WEDNESDAY, 14th October next, Joint Sale of Pedigree Shorthorns, from the Famed Herds belonging to A. M. Gordon, Esq., of Newton; Captain Gordon, of Coombscausey, and Mr. John Wilson, Pirriemill.

THURSDAY, 15th October next, at the Agricultural Hall, Kittybrewster, Aberdeen, Great Sale of High-class Pedigree Shorthorn Bulls, Cows, and Heifers, belonging to Members of the Aberdeen-shire Shorthorn Breeders' Association.

FRIDAY 16th October next, at Inverness Auction Market, Inverness, Great Sale of High-class Pedigree Shorthorn Bulls, Cows, and Heifers, belonging to Members of the Elgin, Inverness, and Northern Counties Shorthorn Breeders' Association.

NOTE.—Special attention is directed to the foregoing Sales of Pedigree Sheep, Horses and Cattle, as they will afford buyers one of the best opportunities that has yet been presented of securing animals, not only of the choicest breeding, but also of the greatest individual merit.

MACDONALD, FRASER & CO., LTD.,
Perth Auction Market, Perth, Scotland

SORE SHOULDERS

Positively cured by Bickmore's Gall Cure.

Also Harness Galls, Cuts and Sores. Good for man and beast. Sample and new horse book 10c.
WINGATE CHEMICAL CO. LTD.,
Canadian Distributors, 645 Notre Dame St., W. Montreal, Canada.

"Please, ma'am," said the maid, "there's a colored man and his wife at the door in answer to your advertisement."

"But I advertised only for a laundress."

"Yes, ma'am, they are her."

Success is the ability to forget failure.

in the Stingaree shed must have suffered some severities before he got through with it.

"I won't forget this, Jim," says he; and he added with regular eagerness, as I turned away, "I think my first crop will be ready in about three weeks now."

"I'm your man," says I, "when you're ready."

I forgot that it was customary to drive down the hill by the Joggins road, and I took the steep way, never heeding. The old horse condoned my forgetfulness with perfect wisdom of his own. The descent was an enterprise that required care, and, in spite of my pricking and urging, he did most certainly take entirely his own time for the job.

Captain Belcher and another compatriot saluted my ultimate landing on level soil.

"I've won," said Belcher.

"What about?" I asked.

"Why, Ed. Nedds an' me was bettin', for the last three or four hours, as to whether ye was goin' up the hill or down it. I took the caution to judge by lan'marks, an' I bet 'down,' an' here ye be, Captin'. I consider that I ain't wasted no time watchin' of ye, neither, for it was as interestin' inch-wormin' a sight as I ever see."

CHAPTER XV.

She of the Whip-hand.

Mary Stingaree and the doctor sat out on the porch together; vines hid its rotting timbers; beauty covered all its defects during the brief marvellously bright summer in this northern clime. The little perch faced the grandeur of the scene.

"I could not write it to you," said Mary. "It seemed too dreadful; he was doing so well, until they enticed him down there, and he fell—he drank again—and was married; trapped into it, I understand, but married, to a little French-Canadian girl down there at the River."

"Yes, I heard that rumor. The man who brought me up here—James Turbine—seems to think it possible there might be some mistake about that. He says the truth concerning the affair all lies with a certain 'Captain Belcher,' if he could only be made to speak the truth. The few other participants, including Rob himself, were too muddled to take away any impressions of the scene that would serve as reliable statistics."

"Surely the girl herself would know."

"She is as courageous as Captain Belcher, I am told. What she affirms, that she will swear to, and blench not, neither be confused."

"It is possible then, you mean, that Rob was not married to her?"

"Jim Turbine certainly intimated that such a doubt was admissible."

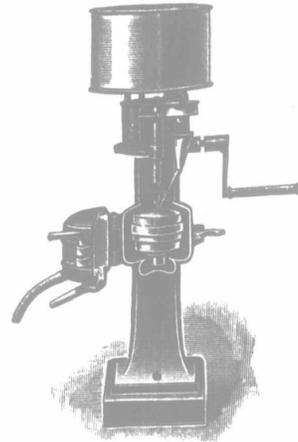
"But Rob himself virtually acknowledges it, and—though he has never gone to live with them down there—he is working with all his might to make a home for her."

"I shall have the mystery solved and the truth brought to light. Everything I hear, with the exception of that one fall, seems creditable to Rob. It was a case of 'kill or cure,'—and it begins to look like 'cure.' He was doomed, body and soul, in the life he was pursuing. He was never sober long enough to look comprehensively and connectedly into his own affairs, or assume any worthy responsibility concerning them. To fill his pockets with cash and carouse it away was the end and aim of his bright being. His father was a pleasure-lover, too, but he had a keen business sense. The property is safely and conservatively invested, and is waxing greater every day of Rob's life; and he, I believe, now, will grow to his responsibilities. A—

—a woman whom he had learned to adore—a good woman—a strong woman—could pilot him through, I believe."

(To be continued.)

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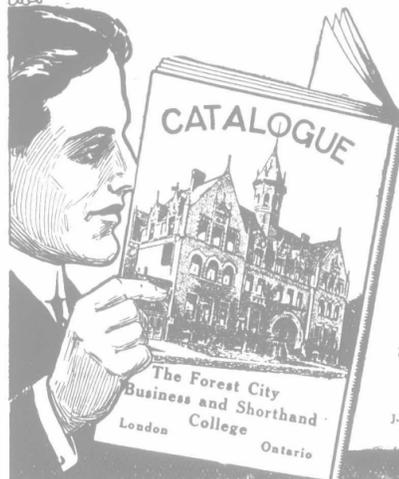
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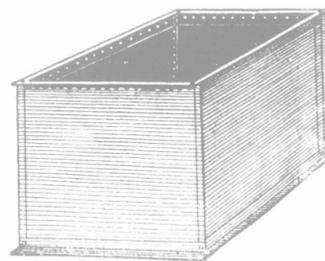
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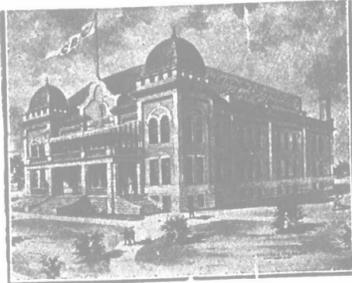


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GOSSIP.

A splendid 7 1/2 x 11-inch photo-engraving of that prince of Clydesdale stallions, Baron's Pride, may be purchased through this office for 50 cents in cash, or it will be given as a premium to any present subscriber of "The Farmer's Advocate" who will send us the name of one new yearly subscriber, accompanied by \$1.50.

The passing of the anti-racing laws in New York State has directed attention to Canada as affording a more than ordinarily good field at this present time for exhibition of Standard-bred trotters and pacers. Several large breeders in the United States have announced their intention of sending some of their best over to the Canadian National Exhibition, Toronto.

One of the most desirable things on a farm is a good fast walking team, and the way to get a fast-walking team is not to overload them and not trot them. Two 1,200-pound horses on a wide furrow plow are overloaded; that is, they are loaded too heavily to walk three miles an hour. Put on three horses of the same size, and the work is light, and the cost of plowing will be reduced and the work pleasanter for both man and team.

The Scottish Farmer and the Stirling Gazette, in their reports of the Clydesdale section of the Stirling Show, in June, 1908, refer in very complimentary terms to the get of the stallion Debonair (12937) (by Hiawatha, dam by Prince of Carruchan, by Prince of Wales), now owned by Mr. J. F. Elliot, of Woodstock, Ont., and especially to the superior yearling son of Debonair, Climax, shown by Mr. James Gray, winner of second prize in his class at Glasgow, and first and reserve for the cup for the best male Clydesdale at Stirling in a particularly strong class.

A MILLION DOLLARS' WORTH OF HORSES AND CATTLE.

It is estimated that the 1,500 horses that will be on view at the Canadian National Exhibition, Toronto, will be worth not less than \$750,000.00, while the cattle will run up to \$250,000.00. Thus, between horses and cattle, we have \$1,000,000.00 worth of live stock that will be on view at the Exhibition. To this has to be added \$100,000.00 for sheep and swine.

OAKDALE HAMPSHIRE DOWN SHEEP.

The Hampshire sheep are the largest of all the medium-wooled breeds, and as an ideal mutton sheep are second to none. One of the very best flocks in Canada is the Oakdale flock, the property of Mr. L. E. Morgan, Milliken P. O. and station on the Toronto-Lindsay branch of the G. T. R. This flock, now about 60 strong, are all imported, and the produce of imported stock, headed by the strong show ram, Big Lord (imp.), winner of second at Toronto in 1906. He is not only a very large, high-class ram, but he is certainly one of the very best sires of the breed ever imported into Canada. Last fall, at Toronto, five of his get, three rams and two ewe lambs, won the Zenoleum Cup as best pen of five lambs of any breed, another pen of three of his get, one ram and two ewe lambs, in the Canadian-bred class, won second in the Hampshire class, and in December, at Chicago, get of his topped the sale, bringing more money than any of the imported ones. Also at Toronto and Ottawa last fall, a shearing ewe of his get won second over all the imported ones in her class. Mr. Morgan is now offering for sale 20 shearing rams, three of which are imported, nine shearing ewes, and a number of ewe lambs the get of this ram and out of imported ewes. Many of them are high-class show animals and in splendid condition. For crossing on grade sheep, or other breeds, for mutton purposes, there is no other pure-bred ram that will give better results than a Hampshire. Parties needing such should order early, as they will soon go.

This country is peopled by a proud race of patriots, who are Canadians on Dominion Day, and Grits and Tories all the rest of the time.—[Toronto Telegram.

The high price of oats, which has been so steadily maintained during the past year or two, has increased the keep of horses to a degree necessitating increase of board rates by livery stables, riding schools, and other similar institutions. While a good thing for the farmer, this has been pretty hard on horsemen. Many explanations have been offered for this unprecedented long-sustained rise in price, but the most reasonable one we have heard is the demand for oats in preparing patent breakfast foods. Whether this increase will continue depends upon the popularity of these breakfast foods, as well as the supply of oats. It is certain that the supply of oats will be increased as soon as the farmers can plant more acreage, which they are bound to do in order to reap the profit from the increased demand and the present high prices.

Mr. J. C. Ross, Jarvis, Ont., writes, reminding readers of "The Farmer's Advocate" that he is still breeding high-class Cotswold and Hampshire sheep, and is prepared to furnish old customers, and also new ones, with choice stock this season in both breeds, having a large number of choice quality to select from, which he is prepared to sell at prices to please everybody. They will be sold according to quality, and his past show-yard record at leading shows in Canada and the United States will justify the statement that he breeds and imports the best. A new importation is now on the way from England, including some of the choicest specimens that can be bought, and Mr. Ross is now open to book for fall delivery.

QUESTIONS AND ANSWERS. Miscellaneous.

WITCH-HAZEL TO FIND WATER.

1. Do you put any faith in the finding of water by a witch-hazel or apple-wood crotch?
2. If so, why does the crotch act as it does?
3. Why will it act with some people and not with others?

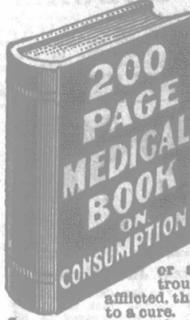
J. S. C.
Ans.—Personally I have had no experience with this method of finding water, but I can see no reason why the witch-hazel or apple-wood crotch should turn and indicate water; consequently I have no confidence in it. On the other hand, I have heard most estimable people declare that they had seen this method indicate correctly the place where water might be found, while only a short distance on either side dry wells had been sunk. It would be hard to convince a man who had had such experience that there was no virtue in the witch-hazel or apple-wood crotch for finding water.

I may add that there is an automatic spring-finder manufactured by W. Mansfield & Co., Liverpool, England. A pamphlet describing the instrument says: "The principle on which the instrument works is the measuring of the strength of the electrical currents which are constantly flowing between earth and atmosphere, and which are always strongest in the vicinity of subterranean water courses, the flowing waters of which are charged with electricity to a certain degree. Should a subterranean spring be present under where the instrument has been fixed, the needle commences to move; note being carefully taken of the number of degrees on the scale, and the position of the instrument changed from time to time, the spot where the greatest movement of the needle has been obtained being that where the well-boring should be made."

"If the needle remains stationary, it may be taken for granted that a subterranean spring does not exist under the spot where the instrument is fixed."

The witch-hazel or apple-wood crotch not being a magnetic needle, we cannot attribute its action (?) to the electrical currents which make the needle move in the automatic spring-finder referred to.
O. A. C. WM. H. DAY.

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 The students of an Eastern college grew so reckless in their behavior that the professor thought to improve their conduct by a lecture on morality. They listened with due submission and humility. In the course of his lecture he said: "My young friends, the floors of hell are paved with champagne, automobiles and chorus girls." He was horrified to hear one of the students say in a sepulchral tone: "O, Death, where is thy sting?"

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QUESTIONS AND ANSWERS. Veterinary.

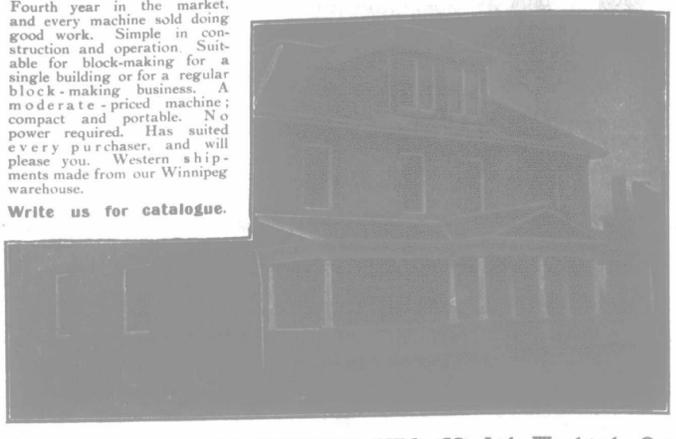
INJURY TO TAIL.
 A ridge appeared last year on heifer's tail, about a foot from the root, but it gave no trouble. About a month ago it reappeared, and extends all around the tail and is quite sore. W. B.
 Ans.—She has had her tail injured in some way. Dress three times daily with a lotion made of 1 oz. laudanum, 1 oz. chloroform, 4 drams acetate of lead, and water to make 8 ozs. If it becomes raw, dress with carbolic acid, 1 part; sweet oil, 25 parts. V.

COW WITH COUGH.
 Old cow has had a bad cough for some time. She coughs worse after drinking, or if chased by a dog. Sometimes when coughing she discharges from nostrils. She will calve in October. W. H. B.
 Ans.—The symptoms indicate pulmonary tuberculosis, for which nothing can be done. The only means of making a definite diagnosis is to have her tested with tuberculin by a veterinarian. There is little doubt she is tubercular, and if her udder is diseased her milk will not be healthful. V.

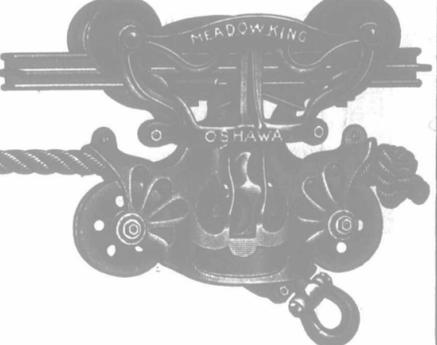
ABSCESS.
 Pregnant mare's leg swelled up last winter when she stood in stable, but the swelling disappeared on exercise. She became lame for a week in the spring, and her leg broke and ran matter at the pastern joint. I bathed it three times daily and it healed, but it still swells when she stands, and the swelling does not all disappear on exercise. R. W.
 Ans.—She received a bruise in some way, and this caused an abscess, from which the tissues became thickened. Get a liniment made of 4 drams each of iodine and iodide of potassium, and 4 ozs. each, glycerine and alcohol. Rub well with this every morning. Feed lightly and give regular exercise, or turn on grass. Some horses are predisposed to thickening of the legs when standing idle, and it is not possible to prevent it in some cases. V.

ORCHITIS.
 Bull's scrotum and sheath became swollen and sore about a week ago. He had some difficulty in urinating. This trouble has passed, but the swelling remains. How long will it be before he is fit for service? J. C. A.
 Ans.—Place him in a comfortable box stall and exclude flies. Give him a purgative of 2 lbs. Epsom salts and 1 oz. ginger. Follow up with 2 drams nitrate of potassium three times daily for four or five days. Suspend scrotum in suspensory bandage and apply heat, either by bathing with hot water or poulticing. Apply several times daily a lotion made of acetate of lead, 1 oz.; chloroform, 2 ozs.; tincture of opium, 2 ozs., and water to make a pint. If enlargement and hardness remains after inflammation ceases, give 1 dram iodide of potassium three times daily (if this checks appetite reduce the dose to 40 grains), and rub the scrotum well once daily with an ointment made of 2 drams each, iodine and iodide of potassium, mixed with 2 ozs. vaseline. He should not be bred until recovery is complete, and the time varies in different cases. V.

BRAIN TROUBLE—EXHAUSTION
 1. Cow, when turned out after being milked a month ago, began to lift her fore feet high, and kept on at this until she fell. After a few minutes she got up all right. For more than a week now she has appeared weak, and will sometimes fall.
 2. Mare that is driven 15 miles daily gave out on the road one day. She perspired freely. I got her home, and she ate and drank well. In a couple of days one fore leg swelled badly, and she went lame. She recovered without treatment. A neighbor had one the same way and it died. P. M.
 Ans.—1. The cow has a growth upon her brain, and probably will not recover. Give her 1 dram iodide of potassium 3 times daily. If this decreases appetite, reduce the dose to 40 grains.
 2. The mare was not feeling well that day, and became exhausted during the drive. A few days' rest and good food resulted in an attack of lymphangitis, or weed in the fore leg, from which she recovered spontaneously. There was some other trouble with your neighbor's mare. V.

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Clydesdales imported and Canadian bred. Our mares all are bred to Acme (imp.) 18th, the best breeding horse in Scotland in 1907. Four male foals and one filly, all from high-class (imp.) mares, for sale right.
R. M. HOLTBY, Sta. & P.O. Manchester, Ont., G.T.R.; Myrtle, Ont., C.P.R.



SPRINGBANK OXFORD DOWNS. Ottawa. This year's crop of lambs are a grand lot, showing phenomenal growth, exceptionally even and beautifully covered. The breeding ewes are a large, vigorous lot, showing a remarkable uniformity of type and quality. This year's importation will materially strengthen the flock, representatives of which may be seen at Toronto Exhibition. For sale are about a dozen shearling rams and two two-shear rams, a number of shearling ewes and this year's crop of lambs of both sexes. As everything indicates a good demand for sheep this fall, intending purchasers should make their selections early.

Wm. Barnett & Son, Living Springs P. O., Ont., Fergus Station, G. T. R. and C. P. R., owners of Springbank Stock Farm, are among Ontario's most enterprising importers and breeders of Oxford Down sheep. Their flock now numbers about 70 head, founded on sheep imported by Henry Arkell. The flock has been annually improved by the use of such high-class stock rams as Rock-sand (imp.) 5th 29108, a Royal winner, and Arkell's 1520, a Toronto, London and Ottawa winner. The sire now in service is Cowley Courtier 2nd (imp.), winner of 2nd at Toronto and 1st at

QUESTIONS AND ANSWERS.
Miscellaneous.

TREES DAMAGED AFTER SALE.

A offers his farm for sale. B comes along and buys it in May of 1907, but will not get possession until October 1st, 1907. In harvest time A turns his hogs in the orchard of young plum and young apple trees. Then, when B moves on the farm, ten plum trees are peeled right around and are dead, one plum tree and three apple trees are damaged by being partly peeled. Neighbors tell me they were all bearing trees. What damage can B charge A for the trees? They are dead.

A CONSTANT READER.

Ontario.

Ans.—Whatever is reasonable. We cannot say what amount could be recovered. It would be just such as the judge (or judge and jury, if case tried in that way), might be disposed to give.

ENSILAGE CARRIER—CEMENT MIXER.

1. Ensilage-cutter carriers run with a chain from a sprocket 2 1/4 inches in diameter (it contains 7 cogs); from this to a shaft at bottom of cutter with a sprocket 9 1/4 inches in diameter (it has 44 cogs on it). From this same bottom shaft there is another sprocket with 12 cogs and 4 1/4 inches in diameter. Chain runs from this last sprocket to carrier. Carrier has a sprocket with 44 cogs and 9 1/4 inches in diameter. The first chain from main shaft runs so fast that it is hard to keep it on. I thought of running it with a belt direct from main shaft to carrier. Could you tell me what size pulleys I would need to run it the same speed as with the chain? I have a pulley 16 inches in diameter. What size would I need on main shaft?

2. Could you give me a plan for cement mixer run with horse-power?

J. M.

1. The first shaft from the main shaft runs 7-44 as fast as the main shaft, and the second shaft runs 12-44 as fast as the first. Multiplying these two fractions together we find that the second shaft runs 21-484 (almost exactly 1-23) as fast as the main shaft; therefore, if the carriers were to be run by a belt, the pulley on the carrier shaft would have to be 1-23 as large as that on the main shaft; 1-23 of 16 inches equals almost exactly 7-10 of an inch; thus, you see, a 16-inch pulley on the main shaft would not be large enough. If you made it 46 inches, then the pulley on the carrier would need to be 2 inches in diameter. There are two objections to this: (1) The main pulley is too bulky and cumbersome; (2) the belt would be inclined to slip on such a small pulley as two inches. Thus you see it would hardly be practicable to run your carriers with a belt. Probably a tension sprocket, so arranged that you could take up the slack in the first chain, would prevent its jumping.

2. I think you had better consult the London Concrete Machinery Co., who manufacture cement mixers for both hand-power and horse-power. WM. H. DAY.

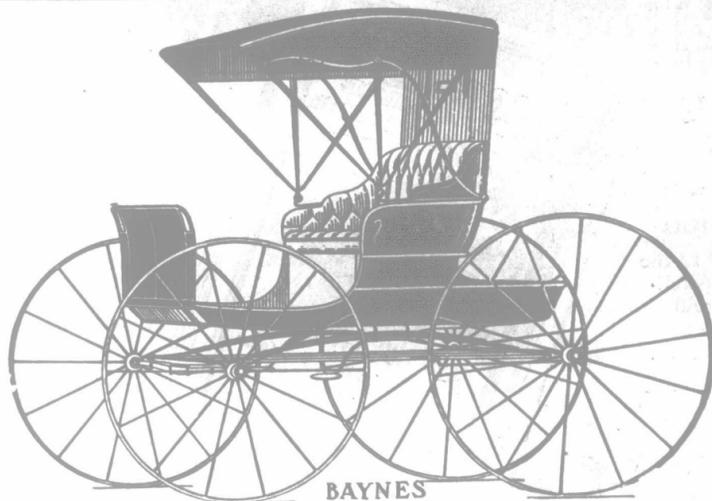
O. A. C.

The prudent stock-owner never allows his cows to fall off in their milk, or his fattening cattle to stand stationary for want of supplementary feeding, as he appreciates the fact that any departure from the ordinary course of events in milking or in fattening is difficult and costly to rectify.

HAVE YOU SECURED PERMANENT FARM HELP?

The best way to secure permanency in your hired farm help is to make application for a married man with a growing family, if house accommodation can be provided. Many farmers have found it distinctly to their advantage to build cottages for their men, and in other ways make provision for their comfort, on the principle that if you take an interest in your hired men they will make your interests theirs, and thus become a valuable asset to your farm, and this great and growing country.

Colonel Howell, of the Salvation Army Immigration Department, James and Albert Streets, Toronto, will be glad to hear from farmers who desire the class of help aforementioned.



BAYNES
No. 517

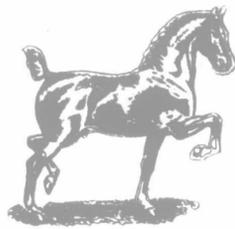
A beauty for 1908. One of the handsomest jobs we have ever turned out. That is saying a great deal for No. 517, because all Baynes Buggies have a reputation for good looks.

No. 517 is a Clipper body buggy, with Auto seat. Roomy, comfortable, carries a good load, and is a splendid rider.

There's another feature about all Baynes Buggies that you want to consider well—Baynes Long Distance Axle, that is noiseless, dustproof and runs a year with one oiling.

There is a dealer near you who can show you the line of Baynes Buggies for 1908. Write us for his name if you don't know him.

THE BAYNES CARRIAGE CO.
LIMITED
Hamilton, Ont.



THE UNION STOCK-YARDS
Horse Exchange

WEST TORONTO, CANADA.

Auction sales of Horses, Carriages and Harness every Monday and Wednesday.
Private sales every day.
Come and see this new Horse Exchange. It will interest you. Also the quarter-mile track for showing and exercising.

HERBERT SMITH, Manager.
(Late Grand's Repository.)

LARGEST IMPORTATION OF CLYDESDALES, HACKNEYS AND PERCHERONS OF THE YEAR.



My latest importation has just arrived home. I have now on hand for sale: 20 Clydesdale stallions from 1 to 5 years of age; 25 Clydesdale fillies from 1 to 4 years of age; 12 Hackney stallions from 2 to 8 years of age; 12 Hackney fillies, all young, and 4 Percheron stallions 3 and 4 years of age. A total of 73 head, with size, quality and action, and bred in the purple. Largest selection in Canada. Will be sold right, and on terms to suit.

T. H. HASSARD, MILLBROOK, ONT.



CLYDESDALES

At Columbus, Ont., the home of the winners, this year's importation just arrived. The pick of Scotland's best. For size, style, conformation, quality and royal breeding, they eclipse any former importation we ever made. Look them up in our barn on Exhibition Grounds. Over 30 head to select from.

SMITH & RICHARDSON, COLUMBUS, ONT.

Shires, Shorthorns and Lincolns

At present we are offering a very choice consignment of imported stallions, mares and fillies received from the great Shire stud of R. Moore & Sons, Beeston Fields, Nottingham, England. They are a grand lot, and will be sold at right prices. In Shorthorns we have a number of choice young bulls, three of them show animals; also an excellent lot of females—all ages.

JOHN GARDHOUSE & SONS, Highfield, Ontario.
Toronto, 14 miles; Weston, 3 1/2 miles.



IMPORTED CLYDESDALES Up to over a ton in weight, with the very richest of breeding and the best of quality. I think no better shipment of stallions ever left Scotland. I have also nine fillies, without doubt the best lot in Canada. All will be sold cheap and on terms to suit. Long-distance phone.

GEO. G. STEWART, HOWICK, QUE.



Imported Clydesdales

the price and terms are right.

I have still on hand 1 stallion, black, rising 4 yrs., by Carthusian, a Toronto winner; 1 rising 2 yrs., by Baron's Pride, 1 rising 2 yrs., by Danure Castle; 4 fillies, a Toronto first and second prizewinner among them. Every one of these is an extra good animal, and

T. D. ELLIOTT, Bolton, Ont.

Watering Milk



Can be honestly done by our system of

WOODWARD
Water Basins.

They give water without any labor whatever, in right quantities and at correct temperature.

Prevent contagion by drinking. No investment around the farm will give greater returns in a year.

The patent valve does it. Full particulars gladly given free of charge, and we will give you cheerfully information and advice.

Ontario Wind Engine & Pump Co., Ltd.,
Toronto, Canada.

ACTION DEVELOPERS

FOR PRODUCING & IMPROVING ACTION IN HORSES.



Used by all successful exhibitors and dealers in England.

Illustrated pamphlets, testimonials and prices of patentee.

G. E. GIBSON, OAKHAM, ENGLAND.

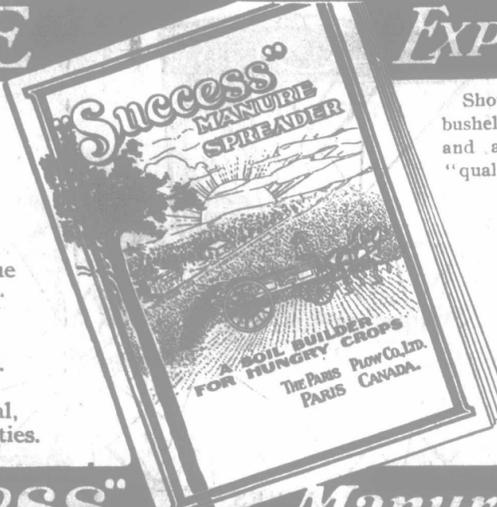
Mr. A. I. Hickman

COURT LODGE, EGERTON, KENT, ENG.,
Exporter of pedigree stock of every description to all parts of the world. During the fall months light and heavy horses will be a speciality. Write for prices, terms and references.

FREE

This Valuable and Practical BOOK on Fertilization

will not be put in the waste-paper basket. Will be read and re-read—and kept for future reference. It is intensely interesting, practical, free from technicalities.



SuccessSM MANURE SPREADER

A SOIL BUILDER FOR HUNGRY CROPS

The Paris Plow Co., Ltd. PARIS CANADA

EXPERT ADVICE

Shows how to lessen the cost per bushel of your wheat, oats, corn, etc.—and at the same time improve the "quality" of each bushel.

Explains why the old method of spreading manure with a fork does not give "best" results—wastes two-thirds of the manure.

Tells about the easiest, most economical, most successful method of distributing manure—the "Success" way.

Send no money for this expensively gotten up book—just give your name and address.

The Paris Plow Co., Limited
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"Success" Manure Spreader.

BROWN SWISS CATTLE
FRENCH-CANADIAN HORSES

We are offering for sale cattle of both sexes and almost any age; the greatest dual-purpose breed alive. Horses of all ages. Stallions, mares and fillies. The best stud in Quebec. Write us for prices. We represent exactly as the animal is.

C. E. STANDISH, Ayer's Cliff P.O. Quebec.
Treebarthe Farm.

Herefords

We have some choice females for sale—all ages—of the right sort; also a few young bulls fit for service. Correspond with us. We can please you. **J. A. LOVERING, Coldwater, Ont., P. O. and station.**

Aberdeen- Suffolk Down Sheep.
Angus Cattle. If you require either of these breeds, write:

JAMES BOWMAN, Elm Park, Guelph, Ont.

ABERDEEN - ANGUS.

For sale: 50 head to pick from, males or females by imported sire. Drumbo station.

WALTER HALL, WASHINGTON, ONTARIO.

SCOTCH SHORTHORNS.

For sale: A number of good Scotch heifers, mostly from imp. sire and dam, and bred to imp. bulls. One imp. yearling bull, red, a straight, smooth one. One 9-months bull from imp. sire and dam. One 10-months bull, by imp. sire and from Duchess of Gloster dam. Long-distance phone. Farm 1/4 mile from Burlington Jct. station.

J. F. Mitchell, Burlington, Ont.

Two Red Bulls.

12 months old. A Clipper and a Martha. Priced low for quick sale. One of them out of an extra milker. Females of all ages for sale. Inspection solicited. Always have on hand some good Lincoln sheep for sale. Long-distance phone.

J. T. Gibson, Denfield, Ont.

MAPLE HOME SHORTHORNS

Our present offering is several very choice and richly-bred one- and two-year-old heifers, and three yearling bulls. A way above the average. Pure Scotch and Scotch-topped.

A. D. SCHMIDT & SONS
Elmira, Ont.

SHORTHORNS

One imported bull. Good Morning (imp.) = 55018 =, five years old. Choice heifers, sired by Lord Lieutenant, imp. Some from imported dams, and all safe in calf to Good Morning, imp. Two extra good young roan bulls, one from imported dam. Come and see them.

M.C.R. Scott Bros., Highgate, Ont. P.M.R.

Pleasant Valley Herd

Present offering: 7 high-class young bulls by Imp. Ben Lomond = 45160 = (80468) and Bud's Emblem = 63860 =, and good imp. and Canadian-bred dams. Write for particulars and prices, or visit personally.

GEO. AMOS & SON, Moffat Station and P.O. Moffat is 11 miles east of Guelph on C. P. R.

Shorthorns, Lincoln and Oxford Downs—Imp. Protector heads herd. For sale: Young bulls and cows; also ram lambs and ewes. All at reasonable prices.

JOHN McFARLANE & W. H. FORD,
P. M. and M. C. Rys. Box 41, Dutton, Ont.

FOR SALE: FOUR Fit for service. Dairy **SHORTHORN BULLS** imp. cows, and all got by Broadhooks Prince (imp.) 55002. Prices the lowest. Also cows or heifers. 60 head to select from.

DAVID MILNE, ETHEL, ONTARIO.

The Maple Leaf Gold Sheaf Harvest Tools.

These tools are tempered by the same process used in the tempering of the famous Maple Leaf Saws. They are the best goods of the kind ever offered to the Canadian public. Every tool is warranted. Handles made of best second-growth white ash. It pays to use the best. If your merchant has not got them, send to the

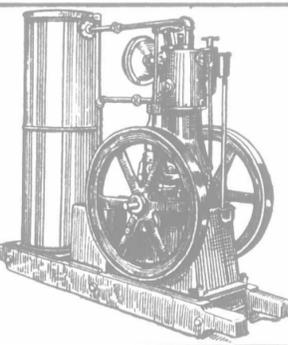
Maple Leaf Harvest Tool Co., Ltd., Tillsonburg, Ont., who are the manufacturers. None genuine that do not have the Gold Sheaf on the label.

J. C. DIETRICH, C. J. SHURLY, F. D. PALMER, C. K. JANSEN,
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FIRST-CLASS WESTERN LANDS
FOR SALE ON CROP PAYMENTS.

We have a large number of improved, partly improved and raw prairie farms, close to towns, railway, churches and schools, which we will sell with a very small cash payment, and the purchaser pays the balance with part of the crop. Write now for full particulars, pamphlets and maps to

TRACKSELL, PRICE, ANDERSON & COMPANY,
BOX 482, REGINA, SASKATCHEWAN.



THE "CHAMPION"
Gas and Gasoline Engine

The only gasoline engine that is sold on trial and guaranteed satisfaction or no sale. The price is low. Write for particulars.

WM. GILLESPIE, 98 East Front St. TORONTO, ONT.

Farmers and Cattlemen, Read This!

When you cannot sell your export cattle at satisfactory prices, at home, and wish to ship them to the Old Country markets, write or wire for steamer space, market and shipping information to

Donald Munro, Live Stock Forwarding Agent and Commission Salesman, 43 St. Sacramento St. Montreal.

Load your cattle carefully, and bill them to me. I provide the necessary feed, insurance, etc., pay freight and all other expenses from shipping point, and give liberal cash advances on all consignments. Cattle are loaded on steamer under my personal supervision, and placed in charge of capable attendants for the ocean voyage. I represent the most reliable salesmen at all the different British markets.

BUSINESS ESTABLISHED 1890. REFERENCES: THE MOUTON BAY, MONTREAL.

QUESTIONS AND ANSWERS
Miscellaneous.

DIFFICULT CHURNING.

We have had considerable trouble this summer in getting the butter to come after it is broke. We churn somewhere about two to three hours before it will gather, and we cannot ascertain the reason. We use a Daisy churn, also a separator. We have no farrow cows, and cows get plenty of salt; also a half gallon pea meal twice daily, and are on good pasture.

W. J. C.

Ans.—Probably the cream is not ripe enough, or it may be too thin—that is, too much milk in it. If you will obtain a cream richer, by adjusting the outlets of the separator, use a thermometer, see that cream is rich enough, churn at a temperature of 65 degrees, and have the churn not much more than half full, you should have no difficulty in getting butter in thirty to thirty-five minutes.

DISLOCATION OF STIFLE.

I have a colt that is stifled. There seems to be quite an enlargement, and the bone cracks when he walks. I have kept him in all summer, and blistered it, but he does not seem to be getting better. What would be a good blister for it, or what would you advise to do with it? Should he be kept in the stable, and would it be possible to bandage it to keep the stifle in place? How long should one wait after blistering it before greasing it; and how long between blisters?

SUBSCRIBER.

Ans.—Keep him quiet in a level place. In partial dislocations in grown horses sometimes a sharp crack of a whip will startle the animal and the bone will fly into place; in other cases (complete dislocation) it will be necessary to place a rope around the fetlock and have an assistant to draw the limb well forward, the hand being used to press the bone forward and inward, when it will usually fly into place with a sharp click. Once in place, it is best kept there by keeping the limb well forward by means of a side line. There is no better blister than cantharides (Spanish fly), one part, to clean lard, six parts. Clip the hair off and rub in well, and grease the third day. Repeat the blister after two or three weeks, and again repeat if necessary.

COWS FAILING TO BREED.

It seems impossible to get my cows with calf. I keep a bull of my own; he was two years old last spring, is healthy and in good trim, yet has not got a cow with calf this summer. He was all right last year, and I had no trouble with my cows. Some of my neighbors last year could not get their cows with calf. They took them to a neighbor's, who had bought a Shorthorn bull; the cows all came back again. I do not know whether he got a calf or not, but a few of the cows came to my bull after. This summer, as far as I know, I do not think there is a cow in calf in this section. The cows are all healthy and in good trim. I have some two-year-old heifers that are the same as the cows. Do you think it is abortion? If so, what would be the best to do? If not, what would be the cause of it, being general all over this section?

C. M.

Ans.—If the trouble were due to contagious abortion, the evidences of it would probably be seen in the enlarging udders of dry cows and heifers, and in other indications, and the aborted fetus would be seen in some cases in field or stable. Abortion is often conveyed to a herd of cows by a bull that has been allowed to serve cows that have aborted. The only cure for this malady that has gained any considerable confidence is the tedious task of flushing the cows with disinfectant solutions, and the sheath of the bull with the same, and delaying services for several weeks in the case of cows that have aborted. The difficulty, apart from this, is as likely to be in the cows as in the bull, but it would be advisable to try another bull, as possibly the quickest way out of the dilemma.

There will be daily demonstrations in buttermaking again this year at the Central Canada Fair, at Ottawa, by Ontario Government experts. On Wednesday and Thursday of fair week there will be two demonstrations daily.

QUESTIONS AND ANSWERS.
Miscellaneous.

A WIFE'S PROPERTY.

1. Where a man and wife buy property, without either party having money to pay down, depending on their labor to pay for farm, and deed is taken out in wife's name, can wife will or sell said farm without husband's consent?
2. Has husband a life interest in wife's property?
3. Can she cut him off in his old age without any means of support?
Property is not all paid for yet, although they are doing well towards paying for it.
CALLANDER, Ontario.

Ans.—1. Yes. 2. Not unless she should die without having disposed of it. 3. Yes.

TRESPASSING FOR BERRIES.

I have the deed of my farm, but it is not all fenced around. There is, however, a good fence between my farm and my next neighbor. Can said neighbor's family come and pick the berries off my farm the same as they would on unoccupied land? They have been doing this for the last five years. I did not mind it when they only picked for their own use; but last year they picked them from almost right under our fingers and sold them, and not only that, but invited people from the neighboring villages to come and pick. They claim that because my farm is not all fenced in I cannot forbid them to pick. Berry season will be on in another week, and I would like to know if I have a right to save them for our own family use.
ANXIOUS ENQUIRER, Ontario.

Ans.—They have no right to do so. You ought to forbid them, and, preferably, under the circumstances, by a notice in writing. In the event of their disregarding such notice, you would be entitled to treat them as trespassers and to prosecute them accordingly.

ROSE BUG—GREEN APHIS.

I wish to know what is the best thing to poison rose bugs and little green lice which come on the roses.
L. C.
Ans.—1. The rose bug or rose chafer is a difficult insect to combat, no remedy in the form of poison or spray having been found entirely efficacious. The beetles fly a great distance in search of food, and may settle on a garden, vineyard or orchard where they have been scarcely known before. One trouble with measures of extermination is that new individuals may continue arriving for several weeks. Arsenical poisons are too slow in their action and contact poisons must be applied too strong for the plants in order to kill these insects. Choice rose bushes may be covered with mosquito netting, leaving no place large enough for the beetles to enter. In other cases the beetles should be gathered daily by hand, tossing them into pans or buckets containing a little coal oil. It is said that showering the plants with a mixture of carbolic acid and soap suds has been found a repellent. Destroying the breeding places by breaking up old sandy pastures is advisable where it can be done. The beetles feed not only on the rose, but on the grape, cherry, peach, plum, pear, blackberry, peony, spirea, mock orange and many other plants. They prefer to eat the petals, stamens and small fruits in flower, but will also attack the foliage. The mature insect appears about the time the grapes are in blossom, and then becomes a serious pest.
2. Syringe the plants daily with a strong decoction of tobacco. Fill a barrel or pail half full with refuse stems from a tobacco factory, and then fill the vessel with water. Macerate thoroughly and it is ready for use. For extreme cases Bailey recommends the following remedy, proposed by an English rosarian. "Take four ounces of quassia chips and boil them ten minutes in a gallon of soft water; strain, and while cooling, dissolve in it four ounces of soft soap (or whale-oil soap). To this may be added another gallon or two of water. The plants should be syringed with this and all badly-infested shoots dipped into it. Pure water should follow the next day to cleanse the shoots." If, at the first appearance of these pests, the finger and thumb are used to rub them off and destroy them, much subsequent trouble will be saved.

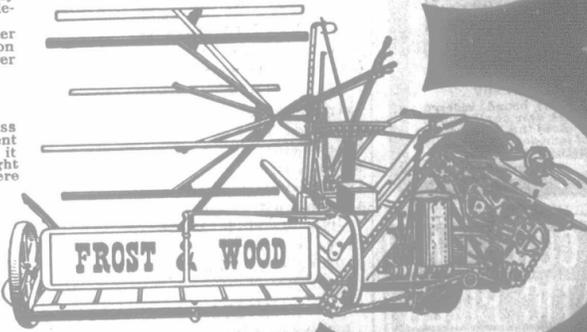
THIS BINDER
Won't Go To the Fence

Testing binders in Manitoba is strenuous business. They have no patience with weak-back machines. If a binder can't stand the strain of continuous hustle all day behind relays of horses it "goes to the fence," and a strong, well-built machine takes its place. That's why our No. 3 Binder is so popular with Canadian farmers—it won't go to the fence. It doesn't disappoint them when the hard, rushing harvest-time is on. No worrying, fretting with broken pitman, or tangled twine, or stuffed elevator. Our No. 3 Binder is strong, light, easily handled; has great elevating power and delivers the bundles securely tied. Eccentric wheel which moves Knotter and Discharge Arms is found exclusively on our binder, and gives an increase of power of about 16 percent. The Knotter

Never Misses a Sheaf

The binder tension allows all knots to pass through without a hitch. Binder attachment is carefully adjusted and tested before it leaves the factory. It will surely work right in the field. Neck-weight is light; there is no side draft. Two horses are sufficient on average ground, because roller and ball-bearings are placed at every necessary point. It makes no difference how rough the field, how tangled, twisted or heavy the grain, it cuts, ties and delivers each bundle with remarkable regularity. No. 3 Binder is made in 5, 6, 7 and 8 foot widths. But send for our free catalog "F.F." and special booklet "Reasons Why," and read all about our No. 3. There are plenty of pictures that explain why it's just the machine for your work. Why not write us now—today? We have an agent in your vicinity because our organization covers the whole of Canada. Consult this agent—he will gladly answer all questions.

THE FROST & WOOD CO., (Limited)
SMITH'S FALLS, CANADA



FROST & WOOD
NO. 3
BINDER

We are offering a very superior lot of
Shorthorn Home-bred Bulls
of the best breeding and quality at attractive prices for the buyer. To see them is all that is necessary. Try to do so if you are in the market. It will pay you.
JNO. CLANCY, H. Cargill & Son, Cargill, Ont.
Manager.

SHORTHORN BULLS
FOR SALE.
At the dispersion of the "Thistle Ha" herd in Jan., 1905, I purchased a few of the best breeding cows. From these cows I now have 6 extra good young bulls for sale. For pedigrees and other particulars apply to
JOHN MILLER,
Claremont Stn., C. P. R. BROUGHAM, ONT.

5 SHORTHORN BULLS 10 HOME-BRED IMPORTED
Herd headed by the grand champion, Prime Favorite, imp. You cannot afford to buy without seeing these bulls. We will appreciate a visit. Females of all ages and most popular lines of breeding. Bell telephone on each farm.
Burlington Jct. Stn., G. T. R. **W. G. PETTIT & SONS,** Freeman, Ont.

The Salem Stock Farm 1854 **MAPLE LODGE STOCK FARM** 1908
SHORTHORNS
A SPECIALTY.
Write for any information.
J. A. WATT, ELORA, ONT. **A. W. Smith, Maple Lodge, Ont.**
G. T. R. and C. P. R. Lucan Crossing Station, G. T. Ry.

Shorthorns!
BELMAR PARC
John Douglas, Peter White, Manager. Pembroke, Ont.
Calves for sale by our grand quartette of breeding and show bulls:
Nonpareil Archer, Imp. Proud Gift, Imp.
Marigold Sailor. Nonpareil Eclipse.
Females, imported and from imported stock, in calf to these bulls.
An unsurpassed lot of yearling heifers.

TWO IMPORTED BULLS. **For Sale: 10 Shorthorn Bulls**
Direct from Aberdeenshire, Scotland, of excellent quality, color and breeding; two from imp. sire and dam, and others sired by Joy of Morning (imp.) = 32070. Prices in Shorthorns and Yorkshires will interest intending purchasers.
GEO. D. FLETCHER,
Erin Stn., C. P. R. Binkham P. O., Ont.

Scotch Shorthorn Bulls
We are offering at hard-times prices five bulls from six to fourteen months old, from the best of imported Scotch Shorthorns. It will pay to see these bulls before buying. Long-distance telephone, 516.
GIBBS WOODFIELD STOCK FARM, St. Catharines, Ont.

MAPLE GROVE SHORTHORNS
6 bulls and 2 heifers for sale. Bred from imp. and home-bred stock. A number of young cows safe in calf. Present stock bull, Starry Morning. **C. D. WAGAR, Enterprize, Ont. Stn. and P.O.**
When Writing, Mention This Paper.

VALLEY HOME SHORTHORNS AND BERKSHIRES. For sale: Young bulls from eight to twelve months old. Young cows and heifers safe in calf, and young yearling heifers not bred yet. Also young Berkshire pairs supplied not akin.
S. J. Pearson, Son & Co., Meadowvale, Ont.
Stations: Meadowvale, C. P. R., and Brampton, G. T. R.

THE STOCK-OWNERS' MEDICINE CHEST
What You Have Been Wanting for Years!
THIS CHEST CONTAINS: PRICE:
1 Colic Draught.
6 Cough Powders.
6 Diuretic Powders.
1 Wound Lotion.
6 Diarrhea Draughts.
12 Condition Powders.
\$3
Full instructions and veterinary advice enclosed. For \$3 you get drugs that would cost you \$10 in the ordinary way.
Send for our medicine chest at once—you may have a sick horse to-morrow, and by sending \$3 now you may save \$300 in a week.
Agents wanted everywhere.
THE STOCK-OWNERS' VETERINARY DISPENSARY,
249 Jarvis St., Toronto, Ont.

Sunnyside Stock Farm
Bulls in service: Queenston Archer = 4898, Trout Creek Stamp = 6766. A number of first-class young bulls, red and roan, and a few cows and heifers, for sale. Prices right.
JAMES GIBB,
Brookside, Ontario.

Spring Valley Shorthorns!
We still have three choice young bulls that will be sold very reasonable, as we do not care to run them over; also a choice lot of cows and heifers, bred to the champion, Clipper Chief, imp.
Kyle Bros., Ayr, Ontario.
SCOTCH SHORTHORNS.
Bull and heifer calves for sale. The best of breeding, color and individual merit. Sired by the Cruickshank Brawith Bud bull, Golden Cross (imp.). Come and see our herd.
R. H. REID & SONS, PINE RIVER, ONT.
Clover Lea Stock Farm.

Scotch Shorthorns We now offer four heifer calves 10 and 11 months old. All reds. Bred from imp. sire and dams. Will be sold right. **C. RANKIN & SONS, Wyebridge P.O., Ont. Wyevale Str.**
Brownlee Shorthorns Three young bulls left yet, 14 to 16 months. Will sell at a bargain. Also a few heifers. Very reasonable. Good milking strains.
C. P. R. station. **D. BROWN, AYR, ONT.**

Athelstane Shorthorns Three choice bulls and a few heifers; low-down, thick-fleshed sort, of noted families, and mostly sired by Star Prince = 53900. Prices very reasonable.
WM. WALDIE, Box 324, Stratford, Ont.
SHORTHORNS AND LEICESTERS!
In Shorthorns, a few females, different ages, of good milking family. Half dozen shearing Leicester ewes.
JOHN LISHMAN, HAGERSVILLE, ONTARIO.

Bone Spavin

No matter how old the blemish, how lame the horse, or how many doctors have tried and failed, use Fleming's Spavin and Ringbone Paste. Use it under our guarantee—your money returned if it doesn't make the horse roan. Most cases cured by a single application—occasionally two required. Cures Bone Spavin, Ringbone and Sidebone, new and old cases alike. Write for detailed information and a free copy of Fleming's Vest-Pocket Veterinary Adviser. Ninety-six pages, durably bound, indexed and illustrated. Covers over one hundred veterinary subjects. Read this book before you treat any kind of lameness in horses. **FLEMING BROS., Champlain, 75 Church Street, Toronto, Ontario.**

BLAIR'S GOUT AND RHEUMATIC PILLS

All druggists: 40c. and \$1.00.
LYMAN, SONS & CO., MONTREAL.

The Handy Stanchion TAKES THE LEAD.

I will ship four on trial to any station in Ontario. If not satisfactory I will instruct where to re-ship to at my expense. This patent device secures or releases the full row of cattle instantly, and every requirement is provided for. Illustrated circulars.

Royal Grafton, Mt. Charles, Ontario.

To Head Your Herd

Why not buy Korndyke Lily De Kol? Born January, 1904. Sire Korndyke Queen's Butter Boy. Dam Miss Lily. This is a handsome young bull, and has proved himself a getter of good stock. Write for particulars. We also have a few cows and calves for sale.

E. & F. MALLORY, Frankford, Ontario.

LAKEVIEW HOLSTEINS

Herd headed by Count Hengerveld Payne De Kol. His dam, Grace Payne 2nd, 26-30 lbs. butter in 7 days, is dam of world's champion 4-year-old butter cow. Sire Count Hengerveld De Kol, 70 A. R. O. daughters, including world's champion milk cow. For sale: 1 service bull; 40 bull calves, by 20-lb. butter cows. 75 head to select from.

W. D. BRECKON, Mgr., Bronte, Ont.

WOODBINE STOCK FARM

Offers a few fine young Holstein bulls and bull calves, sired by Sir Mechthilde Poach. Sire's dam holds world's largest two-day public test record, dam Janthe Jewel Mechthilde, 27.65 lbs. butter in 7 days; average test, 4.46 per cent. fat; out of dams with superior breeding and quality.

Shipping stations—Paris, G. T. R.; Ayr, C. P. R.
A. KENNEDY, Ayr, Ont.

Centre and Hillview Holsteins

125 head to select from. 35 in the R. O. M. Stock bulls Bonheur Statesman, high official backing, and is closely related to Colantha 4th's Johanna; Brookbank Butter Boy. All nearest dams over 20 lbs. From these sires, out of R. O. M. dams, are several young bulls and a few heifers. Prices right. **P. D. EDE, Oxford Centre, Ont. Woodstock Station.**

LYNDALE HOLSTEINS!

Bull calves out of cows with records of from 18 to 20 lbs., also three heifers coming two, and a number of young cows in Record of Merit, bred to a grandson of Pietertje Hengerveld's Count De Kol. **BROWN BROS., LYN, Ont.**

The Maples Holstein Herd!

RECORD OF MERIT COWS. Headed by Lord Wayne Mechthilde Calamity, also in the Record of Merit. Nothing for sale but choice bull calves.

WALBURN RIVERS, Falden's, Ont.

Maple Hill Holstein-Friesians

Special offering: Two bull calves eleven months old; well bred; in fine condition; now fit for service.

G. W. CLEMONS, St. George, Ont.

Maple Grove offers a richly-bred bull calf, 6 weeks old, sired by an Aaggie, Cornucopia Pauline, A. R. O., 34.31 lbs. butter; his dam is sired by a son of Beryl Wayne, A. R. O., 27-14 lbs. butter. For particulars write: **H. BOLLERT, Cassel, Ont.**

Glenwood Stock Farm Holsteins and Yorkshires.

Holsteins all sold out. Have a few young Yorkshire sows, about 2 months old, for sale cheap. True to type and first-class. Bred from imported stock.

Ithos, B. Carlaw & Son, Warkworth P.O., Ont. Campbellford Station.

Ridgedale Farm Holsteins

For sale: 4 bull calves from one to ten months old; 2 heifer calves. All bred from choice dams. Also a pair of choice cows supposed to be in calf. **R. W. WALKER, Utica P.O., Ont. Port Perry (G. T. R.) and Myrtle (C. P. R.) stations, Ontario Co.**

QUESTIONS AND ANSWERS. Miscellaneous.

CREAM SHOULD BE UNIFORMLY RIPENED.

Are as good results obtained from churning cream mixed immediately before churning as from cream having been mixed for some hours? For instance, we have no separator, would it be as well to mix the cream I skim in the morning, providing it is sour, with that which I am going to churn, or should I leave the morning's skimming for the next churning?

A SUBSCRIBER'S WIFE.

Ans.—The cream for a churning should be mixed in one vessel at least twelve hours before churning in order to insure uniform ripening. If lots of cream having different degrees of ripeness be mixed and churned at once, there is too great a loss of fat in the buttermilk, as the ripier cream churns first. Leave the morning's skimmings for the next churning.

UMBILICAL HERNIA.

I have a colt, three months old, that for the last two months has had a lump on the navel about the size of a hen's egg, and lately it seems to be getting a little larger. The lump seems to be quite soft, as though it were filled with water, and can quite easily be pressed back up into the body. What is the matter with it? What is the cause of it? Is it dangerous? What will cure it?

A SUBSCRIBER.

Ans.—This is hernia, or a mild form of rupture. Unless it gets much worse it may be as well to leave it alone for a few weeks, at least, as sometimes nature works out a cure of this class of trouble. If it continues to grow worse it is advisable to put a truss or pad over the part, supported by a leather or strong linen bandage 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 place. Have the straps and buckles fasten to the bandage so that it can be regulated and fastened to prevent its slipping or shifting back or forwards. Keep this on for three or four weeks, and if it does not effect a cure, have your veterinarian apply a clam.

RIB GRASS, RIBWORT, ENGLISH PLANTAIN (Plantago lanceolata).

I send you a sample of a weed, of which I notice a number in my hay. It grows in hay meadows, from 8 to 14 inches high, and has from 8 to 12 stalks from each root, which is from two to four inches in the ground. Is this a bad weed, and if so, how can I get rid of it?

N. M.

Ans.—The weed you send is the rib grass (Plantago lanceolata), which is known by various English names besides the one I have given. You describe its habit of growth well, and I would only add that the leaves are always in a rosette at the base, and that these are lance-shaped and sometimes nearly a foot long. The flower-stalks are stiff, slender and grooved, and much taller than the leaves. The flower heads at first are oval in shape, but become very much elongated and form dense, black, cylindrical spikes, from one to four inches long, when the seeds are ripe. The root-stock is perennial, lasting in the ground for several years. It is erect and short, but does not send off any runners, and it is only in old plants that offsets are thrown out, when it will form large clumps with from 50 to 100 stems. Whether this is a bad weed or not must be decided by circumstances. In clover-seed growing districts it certainly is a bad weed, because the seed is very hard to separate from the clover, and it is on the noxious weeds list, but where clover is grown only for hay it is not a very bad weed, because stock eat the plant readily, and both stems and leaves make good feed, so much so that it is actually grown for that purpose in some parts of Europe, but I cannot recommend it, as almost any grass would be better for the farmer in the space occupied by this plant. In pastures the plant takes the place of grasses, but is eaten with avidity by all kinds of stock. It is easily destroyed by plowing down when the clover ley is broken up.

OTTAWA. JAMES FLETCHER.

HOLSTEINS

We must sell at least 25 cows and heifers at once in order to make room for the increase of our large herd. This is a chance of a lifetime to buy good cattle at bargain prices. The best way: arrange to come and look the herd over. If you cannot, we will do our best for you by correspondence. Also a few young bulls. 100 head to select from. Imported **Pontiac Hermes**, son of Hengerveld De Kol, world's greatest sire, head of herd. All leading breeds represented.

H. E. GEORGE, Crampton, Ont.

Only Bull Calves FOR SALE, HOLSTEINS and AYRSHIRES, Of the best performing strains.

GEO. RICE, ANNANDALE STOCK FARM, TILLSONBURG, ONTARIO.

FAIRVIEW HERD

offers you another son of the great Pontiac Korndyke, who has more high-testing daughters in Advanced Registry than any other living bull. We have four of his daughters in Advanced Registry that average over 28 lbs. each, and over 4% fat. This young bull was born Nov. 2, 1907, is two-thirds white, and a beauty. His dam is sired by a son of De Kol 2nd's Paul De Kol, the sire of Aaggie Cornucopia Pauline. You cannot find better breeding than this. First check for \$150 takes him.

E. H. DOLLAR, Heuvelton, St. Law. Co., N. Y. Near Prescott, Ont.

MAPLE GLEN HOLSTEINS

For Sale: Service bull, brother to Guelph dairy test champion, 1907; three bull calves, one from 22½-lb. cow, one from 17.80-lb. 4-year-old, a Top Notcher from 19.48-lb. 2-year-old. Come and inspect the herd.

G. A. GILROY, Glen Buel, Ont.

Hilton Stock Farm—Holsteins, Cotswolds and Tamworths.

Present offering: Some young cows; a nice lot of young pigs; few boars six months old, and sows in pig.

R. O. MORROW & SON, Hilton, Ont. Brighton Tel. and Stn.

THE GOLDEN LAD BULL.

Golden Fox of Dentonia. First-prize yearling and junior champion at Toronto, 1907; Exhibition. His calves coming from my pure St. Lambert cows proves this cross a wonderful success. Correspondence invited.

T. PORTER, Weston Road, Toronto Junction.

BRAMPTON JERSEYS

CANADA'S PREMIER HERD.—Strengthened regularly by importations from United States, England and the Island of Jersey. We have animals of all ages and both sexes for sale, and the largest herd in Canada to choose from. Write for prices and particulars. Long-distance telephone at farm.

B. H. BULL & SON, BRAMPTON, ONT.

Jerseys 2 Extra Choice Young Bulls For Sale, 8 and 9 months old, grandsons of the great Financial King, out of large, heavy-milking dams. Inquiries solicited.

ARTHUR H. TUFTS, Box III, Tweed, Ont.

W. Willis & Sons, Pine Ridge Farm, Newmarket, Ont.

Breeders of registered high-class JERSEY CATTLE. Stock for sale of both sexes, and reg. Cotswold sheep. Correspondence solicited.

DON JERSEYS

We are now offering a number of heifers of all ages, out of producing show stock, and by champion sires, and in calf to Fontaine's Boyle. Also several yearling bulls out of high-class cows, and by same sires as the heifers. The best lot of young things we ever had for sale. Duncan Station, C. N. R.

D. DUNCAN, DON, ONTARIO.

Stoneycroft Ayrshires

Choice young bulls and heifers of the very best breeding, combining show and dairy quality. Large Improved Yorkshire Pigs from imported sires and dams, now ready to ship.

Stoneycroft Stock Farm, Ste. Anne de Bellevue, Que.

Ayrshires—Oldest-established herd in Ontario. Average B. F. test for the whole herd, 4.2; milk yield, 40 to 60 lbs. a day. For sale: Females of all ages, and several young bulls, all by imp. sire, and some out of imp. dams.

JAMES BENNING, Williamstown P.O., Ont. Lancaster Station.

STONEHOUSE AYRSHIRES

On hand for sale: A number of imp. cows and heifers, winners of high honors in Scotland and Canada; 4 young bulls bred from champions and winners themselves. Extra choice offering.

HECTOR GORDON, Howick P.O. and Sta., Que.

AYRSHIRES Bull and heifer calves from producing dams. Right good ones.

Hickory Hill Stock Farm, N. DYMENT, Dundas Station and telegraph, Clappison, Ont.

Burnside's Champion Ayrshires

My 1907 importation of 75 head being about all disposed of, I am preparing to import again. Mr. And Mitchell, the world's most extensive dealer and breeder of Ayrshires, is at present securing for me the best young bulls from the best herds in Scotland. Send in your order now for a choice bull and a female or two. Bulls will be out of quarantine in time for spring service. Correspondence solicited. Long-distance phone in house.

R. R. NESS, Howick, Que.

HOWGLEN AYRSHIRES! WARDEN AYRSHIRES

Present offering: 1 two-year-old, 2 yearling bulls, and choice lot of spring calves from good milkers.

For sale: 75 pure-bred registered Ayrshires, all ages; prizewinners; many imported. Apply to **F. W. TAYLOR, Wellman's Corners, Ont. Hards Sta., G. T. R. Telephone in house.**

ALLAN P. BLUE, Eustis, Quebec.

Springhill Ayrshires!

A better lot of young cows and heifers we never had. They have only to be seen to be appreciated. "Deep milkers." "Good teats." Just the kind for foundation stock. Bull calves from best cows. Will leave for Scotland shortly to import. Order a choice yearling or bull calf or a female or two. They will be out of quarantine for spring service. Write for prices. Long-distance phone.

ROBERT HUNTER & SONS, Maxville, Ont.

SPRINGBROOK AYRSHIRES

have been bred with a view to large milk and butter production, coupled with vigor of constitution, and being true to type. A few bull calves of 1908 for sale.

W. F. STEPHEN, Box 163, Huntingdon, Que.

KELSO S. F. AYRSHIRES

My winnings at Ottawa this year were: Aged cow in milk, 1st and champion; dry cow, 1st; Canadian-bred cow, 1st; Canadian-bred cow, 3rd. For sale, anything in herd, both sexes. Extra choice stuff.

D. A. McFARLANE, Kelso, Que. Athelstane Sta., G. T. R.

When Writing, Mention This Paper.

MILBURN'S



Many people make a mistake in thinking that the only office of a pill is to move the bowels, but a properly prepared pill should act beneficially upon the liver and the entire glandular and secretory system.

This is just what Milburn's Laxa-Liver Pills do, and by their specific alternative action cure Liver Complaint, Biliousness, Jaundice, Constipation, Flatulency, Heartburn, Headache, Dyspepsia, Water Brash, Catarrh of the Stomach, Coated Tongue, Foul Breath, and all diseases arising from impurities clogging the system.

They are small and easy to take, and do not gripe, weaken or sicken. They may be used as a mild laxative or a strong purgative according to the dose.

Price 25 cents a vial, or 5 vials for a \$1, at all dealers, or mailed direct on receipt of price by

The T. Milburn, Co., Ltd., Toronto, Ont.

Hampshire Down Sheep.

SPLENDID MUTTON, GOOD WOOL, GREAT WEIGHT.

This highly valuable ENGLISH BREED OF SHEEP is unrivalled in its rapid and WONDERFULLY EARLY MATURITY, hardness of constitution, adapted to all climates, and in quality of MUTTON AND LARGE PROPORTION OF LEAN MEAT IS UNSURPASSED.

Full information of

Secretary, Hampshire Down Sheep Breeders' Association,

SALISBURY, ENGLAND.

IMPORTED HORNED DORSETS

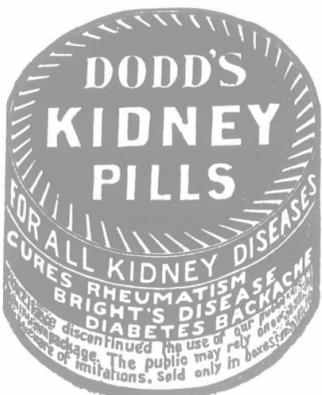
My importation for 1908 will arrive in a few days. Look me up at Toronto Exhibition. I have for sale a few of both sexes, the get of last year's champion all round the circuit, Imp. Romulus 2nd. Canada's banner flock of Dorsets. **JAS. ROBERTSON & SONS, Milton P.O. and Sta., C.P.R. and G.T.R.**

For sale: Sunset, imp., 2 yrs. old—a grand ram and a grand, good sire; 15 shearing ewes; 4 shearing rams; this year's lambs of both sexes. A high-class lot. Yorkshires of both sexes and all ages. Satisfaction is guaranteed. **J.E. Cerswell, Bond Head P. O., Ont.** Beeton or Bradford Sta.

A church army commissioner had a letter recently from a convict, begging him to reform the writer's wife, who was also in prison.

The convict—who is serving a long term—was very anxious about the matter, because, as he said, "it was no credit to him to receive letters from such a place as prison."

Another convict, in the course of a letter to his brother, a pauper, remarked, "Well, Jack, thank goodness I have never sunk so low as the workhouse yet."



GOSSIP.

INCOME FROM SHEEP.

One lamb to the ewe, and that is certainly a low estimate, would mean six lambs at \$3.00 per head, or \$18 for the lamb crop. One dollar and fifty cents per head is certainly not too high for an estimate on wool, which would amount to \$9.00 for six ewes. Adding this to the \$18 for lambs gives a total of \$27, and as proof that I have given the sheep the worst of the estimate, I could cite you many flocks that have given double these returns from a merely market standpoint. I will venture the statement that not a flockmaster will agree to contract the income from his flock at these figures.—[An Iowa Sheep-grower.]

The Tricky Saskatchewan.

Somehow there is a curious likeness between the great river systems of the north and those of middle America. The Mackenzie, that truly noble stream that goes clear to the Arctic Coast, is a twin sister of the Mississippi, despite its family differences, and the Saskatchewan, running from west to east, has more than once been spoken of as the Missouri of the north. The two northern waterways on the Canadian side of the border are in their way, moreover, of equal importance with their American relatives, and it may be that some day, when the country fills up, they will play as large a part in the life and industry of the great basins which they drain.

The Saskatchewan has another point of resemblance besides its size to the southern river systems; it has a habit of annually overflowing and making mischief. Everybody knows how the Mississippi, "Father of Waters," though it is, shows its childishness by refusing to keep its place, and with persistent unreasonableness half-drowning the country in June, and sometimes paralyzing navigation in October with low water. The Saskatchewan is modelled on the same plan, with variations, and within the past few weeks has given costly demonstration thereof.

The geography of the Saskatchewan is somewhat unique. Rising in the Rockies, the river comes down into the northern plains, runs off several tributary streams on either side, and twists and winds its way across Alberta and Saskatchewan into Lake Winnipeg. Rightly speaking, it does not stop even there, but keeps on across Keewatin Territory until it empties into Hudson's Bay, though in its latter section it goes by the name of the Nelson. From its birthplace in the Rockies to its mouth on the bay is a distance of two thousand miles. That is a geographical fact that a great many people do not realize, and, incidentally, it proves that the Saskatchewan is entitled to a place among the great river systems of America. Ordinarily it has been supposed to be a mere wilderness stream that could not possibly count for much.

With its beginning in the mountains, the Saskatchewan has a water supply that never fails, and sometimes is tricky. The spring thaw in the Rockies means high water in the river, and since the thaws only get into good running order in May, the water of the winter snows reaches the river about the time that the spring rains are on. June is the month of rain in the Northwest, and when rains and mountain thaws combine a rise in the river may be looked for. That is the time that the Saskatchewan chooses for its annual frolics. Last year it rose in a single night to such a height, and so unexpectedly, that it swept away nearly the entire season's cut of logs from above Edmonton, and carried them down stream for hundreds of miles. It did nearly as bad this year.

Being a mountain-fed river, too, the Saskatchewan has a particularly swift current, so swift that boating and canoeing are out of the question at Edmonton, and only freighting in steam-tows or flat-bottom boats is possible. The river traffic above Edmonton, in an industrial way, however, is only beginning, and its possibilities are great, while the resources for water power are almost limitless. Some day they will be made use of.

Farther down the river navigation becomes an easier matter, and steamers ply regularly on the section below Prince Albert, and also on the South Saskatchewan, which runs through Saskatchewan—A. F., in Toronto Globe.

WOOL HIDES

E. T. CARTER & CO., TORONTO
Consignments solicited. Write for prices.

I CAN FURNISH JUST NOW A LARGE NUMBER OF EXTRA GOOD Shropshire and Cotswold Rams

A large number of extra good Shropshire and Cotswold ewes, twelve months old. And a few very high-class Shorthorn bulls and heifers. Any of which will be sold at moderate prices.
ROBERT MILLER, STOUFFVILLE, ONT.

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.**

SHROPSHIRE

Flock of the most approved type. We offer good animals at reasonable prices.
W. D. MONKMAN, BOND HEAD, ONT.

SOUTHDOWNS AND COLLIES!

Imported winning collie at stud. **HOLLYWOOD PROFESSOR.** Long-distance telephone.

FAIRVIEW SHROPSHIRE

We are now ready to book orders for Show rams and ram lambs. Show ewes and ewe lambs. Also field sheep of each sex. Our flock is in fine shape, and we are sure they will suit customers. Come to see them, or write for quotations.
J. & D. J. Campbell, Fairview Farm, Woodville, Ont.

Springbank Oxford Down Sheep

Bred from high-class show stuff. Our flock of 70 is now one of the very best. For sale are 12 shearing rams, 2 two-shear rams, a number of shearing ewes, and this year's crop of lambs of both sexes. Show stuff among them. **WM. BARNET & SON, LIVING SPRINGS P. O., ONT.** Fergus Station.

IMP. HAMPSHIRE DOWN SHEEP

My breeding ewes are all imported from the noted flocks of Stephens and Kays. I am offering for sale 20 shearing rams, 3 of them imported, balance imp. sire and dams; also 9 shearing ewes and a number of ewe lambs from imp. stock. High-class show stuff among them.
L.E. Morgan, Milliken, Ont. P.O. and Sta. G.T.R.

Oxford Down Sheep AT FARNHAM FARM.

We are at present offering a number of superior yearling rams and ram lambs, by imported sire and partly from imported dams. Some splendid yearling ewes and ewe lambs. Also a few imported yearling ram lambs. Price reasonable.
Henry Arkell & Son, Arkell, Ontario. Arkell, C. P. R. Guelph, G. T. R.

Oxford Down Sheep

We are at present offering a number of superior yearling rams and ram lambs, by imported sire and partly from imported dams. Some splendid yearling ewes and ewe lambs. Also a few imported yearling ram lambs. Price reasonable.
Henry Arkell & Son, Arkell, Ontario. Arkell, C. P. R. Guelph, G. T. R.

MAPLE SHADE FARM

Will sell 24 excellent shearing SHROPSHIRE EWES, also 6 thick shearing rams. All are by an imported ram and from imported ewes, and would be splendid sheep for foundation of new flocks. They are offered at a reasonable price, either in one lot or in smaller flocks. Come and inspect, or write.
JOHN DRYDEN & SON, Brooklin, Ont. Stations: Brooklin, G. T. R.; Myrtle, C. P. R. Long-distance telephone.

CEDAR LODGE YORKSHIRES

100 head of brood sows, imp. and the product of imp. stock, weighing from 500 to 800 lbs. each. Stock hogs by imported sires and dams, very large and full of quality. Young stock of both sexes constantly on hand for sale. Pairs not akin. Satisfaction guaranteed.
P. O. COLLINS, Bowesville P. O., Ontario. Manotick Sta., C. P. R.

Elmfield Yorkshires

50 pigs, 4 to 10 weeks old; pairs not akin. Bred from imp. and Canadian-bred sows. Also young sows due to farrow in June and July. Young stock never better. **G. B. MUMA, Agr. C. P. R.; Paris, G. T. R.**

OHIO IMPROVED CHESTER WHITES.—Largest strains. Oldest-established registered herd in Canada. Young sows in farrow. Choice pigs 6 weeks to 6 months old. Pairs furnished not akin. Express charges prepaid. Pedigrees and safe delivery guaranteed.
E. D. GEORGE, Putnam, Ont.

Advocate Advertiser's Reap Results.



Maple Leaf Berkshires

Large English breed. Now offering King of the Castle sows, and sows for sale, 10 and 12 weeks old.
JOSHUA LAWRENCE, OXFORD CENTRE, ONT. Woodstock Station.

Duroc-Jersey Swine

and Leicester sheep—25 one and two shear ewes, 3 shearing rams, and this year's crop of ram lambs. Also sows in pig, and sows ready to breed; boars fit for service, and pigs ready to wean.
Mac Campbell & Sons, Harwich, Ont.

MEADOWBROOK YORKSHIRES.

Young stock of both sexes. A number of sows old enough to breed, all sired by imp. Dalmeny Topman. Everything guaranteed as represented. **J. H. SNELL, Hagersville, Ont., P.O. and Station.**

Yorkshires

A choice lot of boars and sows just farrowed and weaned. Boars ready for service, and sows ready to breed and bred. Bred from imp. and prize-winning stock.
GEO. M. SMITH, Haysville, Ont.

CHESTER WHITE SWINE

AND SHROPSHIRE SHEEP. Write for prices.
W. E. WRIGHT, GLANWORTH, ONTARIO.



LARGE ENGLISH YORKSHIRES

—We have a limited number of choice young pigs for sale, bred from our choicest sows, and got by the imported boars, Dalmey Joe 13577 and Broomhouse Beau 14514. Pigs from the latter won all the first prizes at the Ottawa Fat-stock Show last March for the best dressed carcasses, and sweepstakes over all breeds or grades. We guarantee satisfaction in all mail orders.
JOSEPH FEATHERSTON & SON, Streetsville, Ont.

Newcastle Tamworths and Short-horns.

—For Sale: 90 spring pigs, both sexes; boars fit for service; sows ready to breed and sows bred to imp. Cholderton Golden Secret, descendants of Colwill's Choice and Newcastle Warrior, both Toronto champions. Also several Shorthorns; females of high class. Prices right, quality considered.
A. A. COLWILL, Newcastle, Ont.

GLENBURN HERD OF YORKSHIRES

Winner of gold medal three years in succession. Six young boars from 6 to 9 months; also 75 young sows, from 6 to 12 weeks old.
DAVID BARR, JR., Box 3, Renfrew, Ont.



MONKLAND YORKSHIRES

are the easily-fed, quick-maturing kind. The sort the farmers want. All ages for sale. 100 sows bred now.
JAMES WILSON & SONS, FERGUS, ONTARIO.

SUNNYMOUNT BERKSHIRES

For Sale: A few boars fit for heavy service.
JOHN McLEOD, MILTON, ONTARIO. Importer and Breeder. Post office and stations, C. P. R. and G. T. R.

Willowdale Berkshires

are unsurpassed for quality and breeding. Young stock, all ages, for sale reasonable. Satisfaction guaranteed. Long-distance phone in residence. **J. J. WILSON, Importer and Breeder, Milton, Ont., P.O. & Sta., G.T.R. & C.P.R.**

For Diarrhoea, Dysentery, Stomach Cramps, Colic, Summer Complaint, Cholera Morbus, Cholera Infantum, and all Looseness of the Bowels
There is no Medicine Like



It has been a household remedy for 63 years. You can always rely on it in time of need to do just what we claim for it. Do not allow an unprincipled druggist to palm off a cheap substitute on you.

The genuine "Dr. Fowler's" is manufactured by The T. Milburn Co., Limited, Toronto, Ont.

THE ONLY CURE FOR DIARRHOEA.

"I have used Dr. Fowler's Ext. of Wild Strawberry for diarrhoea, and I think there is not a better remedy to be found, as I have a large family and all subject to it. I would not be without it in the house as it is a quick cure, and 'the only thing' that will cure them."

Mrs. Robt. Rahm, Burketon, Ont., writes:—

BEAL Engraving and Electrotyping Company, Limited

MAKERS OF EVERYTHING IN FINE PRINTING PLATES
 LARGEST STOCK CUT HOUSE IN CANADA
 WHEN ISSUING YOUR NEXT ROUTE OR SALE CARD, ORDER YOUR ENGRAVING FROM US.
 193-195-KING ST. LONDON, CANADA.

QUESTIONS AND ANSWERS. Miscellaneous.

PLANTAIN.

Enclosed please find a weed which is growing very extensively in my front lawn. It seems to be spreading very fast, and this summer it has got into my lane. Will you please tell me, through your valuable paper, what it is and how to get rid of it?

A Scotchman tells me that it grows quite thick in some parts of Scotland, and is a good thing to fatten sheep on. Would it be advisable for me to pasture my lawn with a few pet lambs.

CONSTANT READER.
 Ans.—This is English plantain. See reply to N. M. in this issue.

GOSSIP.

The Oxford Down sheep at Maple Villa Farm, the property of Mr. J. E. Carswell, Bond Head P. O., Simcoe Co., Ont., are an exceptionally high-class flock, the get of such noted show rams as Vanity (imp.), Bryan 18th (imp.), Kelmscotonian (imp.), Hampton Hero 4th (imp.), Hamtonian 96th (imp.), and Sunset (imp.); the last-named the present stock ram, and the sire of this year's crop of lambs. Sunset is a wonderfully good individual, and a wonderfully good sire. As a number of the shearlings are by him, he is for sale—a high-class sire for someone, and only two years old. This is one of Ontario's best flocks of Oxford Down sheep, among which are a number of winners at Guelph and other shows. For sale are 15 shearing ewes, 4 shearing rams, and this year's crop of lambs, both sexes. The Yorkshires at Maple Villa are all of Flatt's breeding, with imported sire and dams, very large and of ideal type. In use until lately was S. H. Topsman 13th, a son of the great champion, Duke of York (imp.). At present the stock boar is S. H. Oak 3rd, by S. H. Barrowfield Royalist (imp.); dam S. H. Dalmeny Satisfaction 1st (imp.). He is all that could be desired in type and quality, and a very prepotent sire. In breeding are over a dozen sows, mostly of Flatt's breeding, of his choicest strains and grand individuals. For sale are sows bred and ready to breed, and younger sows and young boars coming on.

PLEASANT VALLEY SHORTHORNS.

Few herds of Shorthorn cattle are kept up to a higher standard of excellence than the Pleasant Valley herd., the property of Messrs. Geo. Amos & Son, of Moffat, Ont., twelve miles east of Guelph. Owing to numerous sales in the last few months the herd is somewhat reduced in numbers just now. From a general average of about 75, there are now only about 45 head on hand, among which are such grand good ones and fashionably-bred ones as Imp. Mabel of Knowhead, a Mysie, by Prince Victor; Imp. Princess Victoria, a Cruickshank Victoria, by Morning Pride; Victoria 72nd, a daughter of Princess Victoria, by Imp. Greengill Victor, a grandly-fleshed three-year-old; another, a year younger, is a full sister, a real good kind; Imp. Collynie Fragrance, by Scottish Fancy; Lily Fragrance, a yearling daughter, by Old Lancaster (imp.); a show heifer, another daughter, is by Bud's Emblem, a Toronto winner, son of Old Lancaster; this youngster is the making of a winner; Sweet Fragrance (imp.) is by Alastair; Scottish Queen (imp.), a Jilt, is by Scottish Prince; she has a grand yearling heifer by Old Lancaster, and a show bull calf, seven months old, by the present stock bull, Imp. Ben Lomond, one of the best sires imported to this country; Imp. Flowery, a Cruickshank Orange Blossom, is by Knight of Strathbogie; she has a roan yearling daughter by Old Lancaster, a cracker, and a ten-months-old bull calf by Bud's Emblem; Imp. Augusta Girl, a Bruce Augusta, by Clear the Way, has a two-year-old daughter by Imp. Greengill Victor, and a ten-months-old bull by Bud's Emblem; Imp. Meadow Beauty, a Killeen Beauty, is by Ben Lomond (imp.). Others are a real choice two-year-old heifer, a Mysie, by Old Lancaster, and a yearling full sister, both high-class show heifers; Cecelia Ray is a Cecelia, by Imp. Scottish Knight, and has a wonderfully choice six-months-old bull calf by Imp. Ben Lomond; Lancaster Princess is another Mysie-bred daughter of Old Lancaster, and has a show heifer calf by Imp. Ben Lomond. These mentioned are representative of the breeding of the herd, which is one of the best in the country. Intending purchasers should look up Amos & Son's exhibit at Toronto Exhibition. Some exceptionally choice things will be there, and the Messrs. Amos breed them to sell.

HOW I CURE

WITHOUT DRUGS

A great many men are dopping their stomachs with drugs, trying to overcome some chronic disease or weakness, and wonder what makes them so nervous, restless, and unable to think clearly. They naturally blame the disease for it, but the trouble is really caused by drugging.

Your stomach, when it is working right, generates the power which runs every organ of your body. This power is electricity. When your stomach, kidneys, liver or digestive organs get out of order, it is because they lack the necessary electricity to enable them to perform their regular functions. The breaking down of one of these organs nearly always causes other trouble. Nature can't cure them, because your body hasn't enough electricity to do the work; so you must assist Nature by restoring this electricity where it is needed.

My Electric Belt does this while you sleep. It saturates the nerves with its glowing power, and these conduct the force to every organ and tissue of your body, restoring health and giving strength to every part that is weak.

Electricity is a relief from the old system of drugging. It does by natural means what you expect drugs to do by unnatural means. It removes the cause of disease, and after the cause has been removed nature will do the rest. It gives back to the nerves and organs the power they have lost, which is their life.

My Belt is easily and comfortably worn next to the body during the night, and gives out a continuous stream of that strength-building, nerve-feeding force which is the basis of all health. It's easy and sure to be cured by Electricity, and the cost is not half an ordinary doctor bill.

Mr. Thos. Johnston, Box No. 288, Deseronto, Ont., says: "It is some five or six years since I got your Belt, I am well satisfied with it. It cured me, and I have not been bothered since, and have not used it since then."

If you are sick and discouraged with drugging your system in search for relief, with no result, try my Belt. If it fails to cure you, it costs you nothing. Reasonable security is all I ask. Remember, my terms are

PAY WHEN CURED

GET IT FREE.

Get my 80-page book describing my treatment, and with illustrations of fully developed men and women, showing how it is applied. This book tells in plain language many things you want to know, and gives a lot of good, wholesome advice for men.

If you can't call, I'll send this book, prepaid, free, if you will enclose this coupon.

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 112 YONGE ST., TORONTO, CAN.
 Please send me your book, free.

NAME.....
 ADDRESS.....

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QUESTIONS AND ANSWERS. Miscellaneous.

REGARDING MOTORISTS.

Kindly publish the rules and regulations governing the use of the public highways by motor cars or autos, and the rights and privileges of the horse-men on same. CONSTANT READER. Ontario.

Ans.—It would take far too much space. The Act to regulate the speed and operation of motor vehicles on highways, and the Act amending same, together occupy over seven pages of the Ontario Statutes. We can only refer you to the Acts mentioned. They are to be found at pages 384 to 389 of the statutes of 1906, and pages 421 and 422 of the statutes of 1908.

BRIDGE TOLLS.

A number of people formed a company and bought a farm to subdivide into building lots; then they built a bridge across the river, opposite one of the main streets of city, and opened up a street as a continuation of said city street, naming it the same. Now the bridge is so narrow that neither township nor county will take it over, the respective councils being afraid of liability in case of accidents; yet the traffic is so heavy that there has to be periodical repairs, such as new plankings. To pay for these repairs the company want to put a toll on all teams, etc., using it. Can they do this? The bridge has been in constant use for ten years, and the council votes money to carry an electric light on it. N. A. Z. Ontario.

Ans.—We think it highly probable

that they are in a position to legally do so; but we have not sufficient of the facts before us to enable us to speak definitely.

A STALLION'S SERVICES.

A bred a mare to B's horse during the season of 1907. He bred her on June 10th, and continued on till July 18th. The season route was from 1st May till 1st of July. The terms of his bill were: (1) To insure a mare, \$15. (2) Mare must be returned during season regularly, or will be charged as season mare. (3) Parties disposing of mares will be charged whether in foal or not. The mare was bred as a season mare. After failing to get the mare in foal, A went to B and told him that he was going to another horse. B did not object. A bred the mare to C's horse on August 9th, and she foaled on July 13th, 1908. A has paid C for foal, and B is now threatening suit for foal. Can he collect it? J. H. B. Ontario.

Ans.—According to the foregoing statement of case it would seem that, under the circumstances, B could hardly recover what he claims. He may, however, be legally entitled to be paid something, as it does not appear from the statement that there was any contract on his part insuring a foal.

"Did you say I had twenty minutes to wait or that it was twenty minutes to start?" asked a traveler of the porter of a hotel restaurant.

"Twenty minutes," said ye had twenty minutes to wait, an' that's all ye did for me. Ye train's just gone."