

CANADA'S BEST AGRICULTURAL PAPER

SUGGESTIONS ON MATTERS OF AGRICULTURAL INTEREST

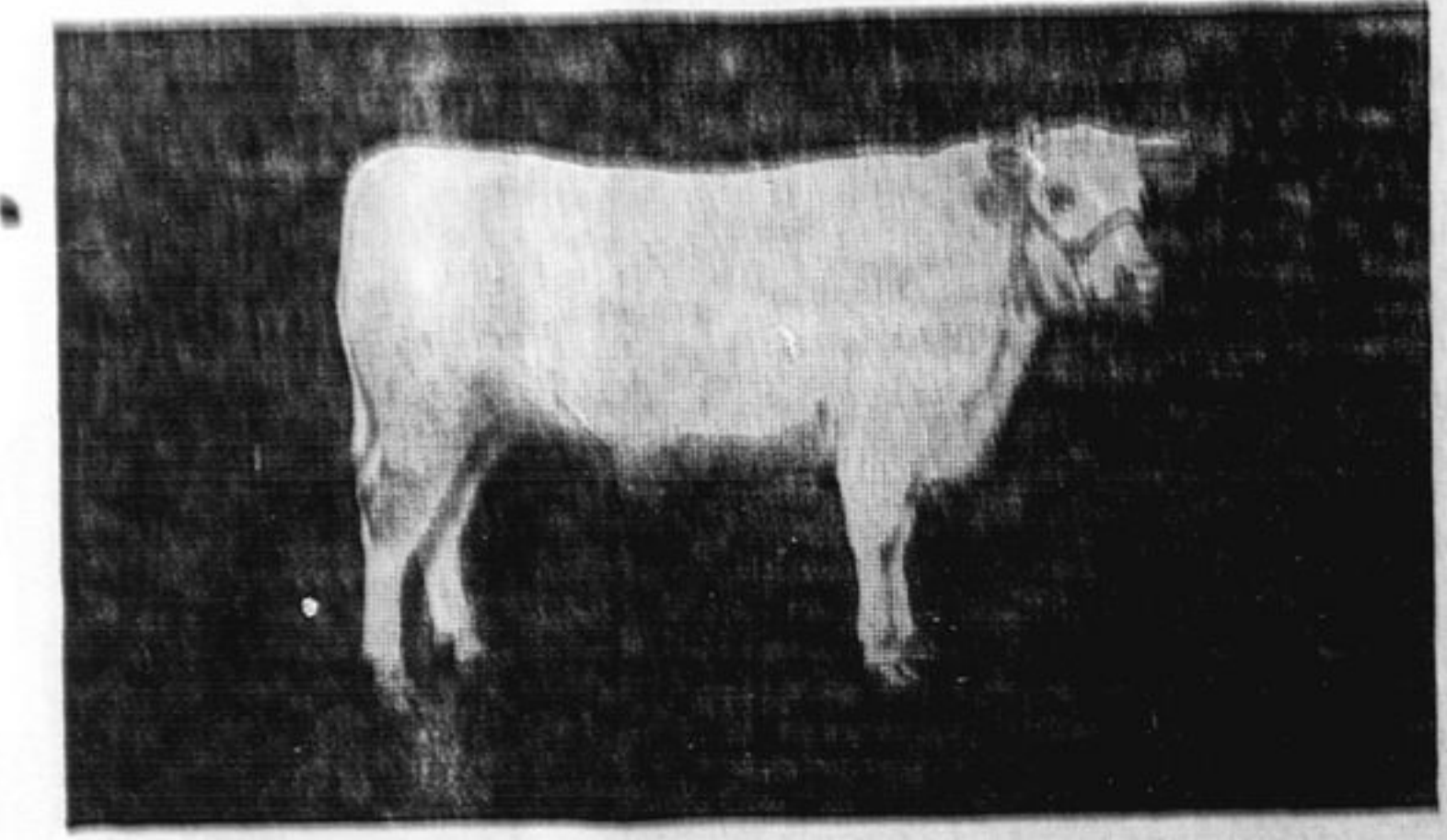
THESE are the days of agricultural education in the land, and in a very few years to come the farms of the country will be worked by men having a fuller knowledge of what can be obtained from the soil; what crops will give the best results according to the nature of the ground in which they are sown, and how best they may be garnered. In the past most of the farm knowledge has been handed down from father to son as the generations have gone, with results that cannot be said to have been of the best. Sometimes the father has been a good task master with a son that was not worthy of being taught; then again there has been the opposite case, when the father with little knowledge could not impart even that to an over-zealous boy whose whole ambition would be to know all that was possible regarding his calling. What was a boy to do in a case like this? Educate himself as best he could by reading such books and papers he could get possession of. To-day all this is changed, and we find the schools paying attention to the elementary principles of an agricultural education. This is but the stepping stone to the agricultural colleges which are springing up, and these, it is confidently hoped, will in the future lend such a stimulus to farm knowledge that we will not only receive from the land the product that is expected of it, but a very much improved product. Nature does much for the farmer in gaining him his livelihood, but nature cannot do everything. The farmer must needs do a great deal himself, and the more he knows of his calling the more profitable can he make it. Education is a valuable adjunct, and it behooves the agriculturalist as well as the manufacturer to see that his son receives the best his purse can afford.

HOW have you stored your farm machinery for the winter is a question which suggests itself at the present time. Has it been properly cared for so that the best results may be achieved when next it is put into commission. To allow valuable labor-saving machinery to rust its life out is not one of the things that is going to add money to the farmer's bank account. To neglect giving it proper attention means fresh outlay when the time comes around and it is found wanting; nay it is useless, and must be replaced if the crops are to be properly husbanded. If you have not looked after your machinery, do it now. It is not too late in the season. Wherever a shelter can be provided there is no good excuse for neglect of this part of the farm equipment. Such a shelter need not be expensive, but should be proof against rain and snow. If it adds 20 per cent. to the life of machinery—a moderate estimate—it is a big money saver. There are many who cannot house their machinery. The average tenant cannot afford to build the necessary sheds; and the new settler, burdened with debt, is forced to leave such matters to later and better times.

At any rate, take off all canvases, reels and sickles. Protect binder and mower guards, so that chance injury to stock will not occur. Clean all bearings, take off all chains, clean out tool boxes, put everything in shape to hitch the team on in the spring. Make out a list of new castings needed, get and put them on. Go over all the burrs and see that they are tight. With a cloth rub hard oil over all polished surfaces, such as plow lays. Turn unused wagon boxes upside down. Remove plow tongues or turn them about so that they will not be broken. Take off all clevises and store them, sickles (well-oiled), plow-lays, binder chains, wrenches, twine and odds and ends where they are safe from rust and the small boy.

IT is now known that until very recently dairy cows have never been fed correctly. And while this valuable demonstration does not furnish positive proof that meat producing animals have not been—and are not now—fed with mathematical and scientific accuracy, yet it does justify a strong suspicion that they have not been so fed in the past, and are not now. In fact, one pioneer worker in animal nutrition is already convinced that steers are fed at about double the necessary cost, though his research has not gone far enough yet to actually demonstrate the truth of his conviction. But if it should be determined that steers have been fed at a cost of even 50 per cent. greater than necessary, it would be staggering to have computed in dollars the economic waste which has been caused by not knowing it years ago. Experiments are now being made at nearly all Experimental Farms by the professors of animal husbandry with a view to arriving quickly at a decision as to what is the best way to feed economically and get the best results.

THE whys and wherefores of the farmer's poor turkey crops were very aptly stated in the following paragraph penned by a poultry man of wide experience. Our readers would do well to take a hint from what he says: "Immediately preceding the Thanksgiving market, a turkey buyer drives up to the farmer's door. He wants to know how many turkeys will be ready for the coming holiday. The flock is rounded up, and inspection proves that all the early-hatched ones will do, possibly some of the old birds being included. In the flock there are some late-hatched runts, too small and too thin to be of any value for market. The buyer disposes of these, so far as he is concerned, by saying that, while they are too small to be available now, they will grow so as to be good breeders for next year. So the deal is made, all the early hatched, large, strong, vigorous birds are sacrificed to the greed for gold, and the young, puny ones kept to be the parents of the flock the coming year. Is there any other branch of the live stock business in which the breeder would be so foolish? But I believe that is just the reason why a one-time profitable industry on many a farm has been destroyed."



"DOC," THE GRAND CHAMPION STEER AT RECENT SHOW OF THE NORTHWESTERN LIVE STOCK ASSOCIATION, ST. PAUL, MINN.

BUTTER QUEEN OF THE WORLD. Here is a very interesting item about a Jersey cow from the pen of Prof. A. L. Haecker, in the Twentieth Century Farmer. Under a picture of a Jersey cow is this legend: "Financial Countess, 155,100, as she appeared at the close of her record-breaking test for one year, under the rules of the A. J. C. C.; 13,248 pounds of milk, 736 pounds 4.6 ounces of butter fat, 335 pounds, 10 ounces of butter, 35 per cent. fat; actual churned butter, 844 pounds, 13 ounces. Owned by C. E. Parfit, Golden, Colorado." The professor says:—"She is a grand cow of the fine 'Island type,' and the very exponent of a perfect milk-making machine. The fine, clean-cut head and almost human eyes tell of the fine breeding and nerve power she possesses. Here we have type and conformation directed and shaped to an end, and that end is one of the grandest and best derived from animals, namely, good milk. But two cows officially tested in all the world have excelled the butter record of Financial Countess, and these two cannot show the life record that Countess can. For example, the cow holding the highest record was dry during the three years previous to the test year, and then she did not carry a calf through half of the test year, as Countess did. The other cow has not the steady breeding record of Countess, and both required more feed to make their records. Considering all these things, it must be said that Financial Countess is the butter queen of the world."

DAIRYING

THE IMPORTANCE OF CLEANLINESS REGARDING MILK

Lack of Care the Cause of an Impure and Unwholesome Product.

THE ABSOLUTE NECESSITIES.

BY EDGAR L. VINCENT.

Is it pure? Is it wholesome? Is it such as you would like to use yourself, if you were in the city buying all you have to eat? Does it make good, clean, healthy butter?

It has happened to the writer to live both in the city and in the country. From the standpoint of the man who produces and who consumes I know some things about milk and butter that I wish I did not know. I know of men who never strain the milk they take from their cows, but turn it right into the can and send it away to the

POULTRY

PROPER FEEDING OF LAYING HENS OF IMPORTANCE

Should Be Hungry All Day but Have a Full Supply at Roosting Time.

HUNGRY HENS WILL HUSTLE.

BY J. M. A. EDMONDS.

No cast iron rule can be laid down for feeding laying hens. The large breeds will require more food than the smaller breeds, and the hens which lay most will require more food than those that are not as good layers.

Hens need a certain amount of food, suitable to the time of the year and the laying season. Lazy hens will get fat on a ration which would mean almost starvation for hustling, laying hens, and unless the flocks are weeded out feeding is useless and costly. Try to feed so that the hens are hungry all day long, and so that each one may get a



H. M. THE KING'S PRIZE DEVON HEIFER LINDA, WINNER AT BIRMINGHAM, ENG.

public creamery. I know other men who furnish their customers with milk that always has a deep sediment in the bottom of the bottle. I have bought milk which tasted so of the barn that we could not use it, and I have been in barns which were so dark and unclean that the wonder is that any cow could ever live long and produce healthful milk.

All these things I know to be absolutely unnecessary. They do not go along with the milk business of necessity. They are simply due to lack of care and more or less the result of life-long careless habits. I presume if you were to say something to many of the men who furnish impure milk, they would be up in arms in a moment, and fly around like hens with their heads off. They unclean? Not a bit of it. You are insulting them!

But at the risk of severe criticism I am going to ask every man who reads this article to stop and ask himself, "Is the milk from my dairy the very best I can furnish? If not, what can I do to make it better?"

Following out this train of thought, there is not a particle of doubt in my mind. When does it happen that we reach the top in any such work? For the man who wants to do better these few simple suggestions are given today.

First, we may place clean men. By that I mean men who are willing to wash their hands and wipe the udders of their cows well before they begin milking. Who will work at a clean suit of clothes when they are ready for milking. "I must change my clothes now and do the chores," and then they go and put on the very worst looking suit they can find—the suit so stiff with dried milk and other filth from the stable and cowyard that they will almost stand alone, and then they think they are just ready for the business of milking. What a shame! So I place the neat man first.

Then clean the stables. It is easy to keep the stables neat if we really set out about it. A few minutes' work every day will insure after the work is all done for the night will place the walls in condition for the next morning's work. By that time the dust will all have settled so that the walls will be clean and bright. Now often is it the rule to do this work just at milking time! Then we can't clean it if anything. If we wash about with water and brush when the cows are about to come into the barn, or after they are in, we set the particles of dust flying. These settle soon—they are bound to do that—and where do they go but into the milk!

What do the milkers? What advantage is the work we have done in such a case as that?

Next, shall we not place clean yards? For to often our cows are compelled to wade through deep mud to get to the barn. With ankles and udders covered with mud they reach the stables. Do the very best we can we cannot now clean up our cows so that some particles of impurity will not find their way into the pail. So, it is exceedingly important that we shall have our lanes and yards just as free as possible from mud. Gravel will do a great deal in this line. Drains are essential where the land is low. Stones may be drawn into shallow places. By every possible means we must work for clean yards.

And then come clean pails, buckets, cans and coolers. Not two days ago I saw a strainer pail at a farm in my locality which had not been half washed after it was last used. The milk means we must work for clean yards.

Stop and think every time that somebody must eat this milk and the butter from our dairy. Think again that impure milk carries the germs of disease. If we knew that the sickness and death of somebody's dear one lay at our door, would it not give us a pang of remorse that we had not done our work better? Finally the food we give our cows has an important bearing on the quality of the milk and butter we produce. Not-

ARBORCULTURE

HOW TO PLANT A TREE TO THE BEST ADVANTAGE

Fourteen Rules That Will Be Found to Produce Excellent Results if Followed.

ADVICE AS TO BEST SPECIES.

BY MARCUS SMITH.

The following are a few rules which will be found wise to follow in the matter of tree planting:—

1. Select first the tree best suited for your purpose, be that shade, ornament, fruit, production of lumber, wind break or fence posts.
2. Bear in mind that the tree you are planting, if of proper species, may be a shelter for and a pride of future generations, or it wrongly selected, it may last but a decade.
3. The one advantage, that of rapid growth, should not decide what tree to plant. Innumerable insects, fungoid diseases and the necessity for frequent pruning, besides a brief period of existence, may characterize the tree of your choice, and it should be discarded.
4. Where there is slight opportunity for frequent watering, tree species demanding large quantities of water should be discarded. They will be disappointing.
5. Elms, cottonwood and swamp maple, among the class requiring much water.
6. The oaks, ash, sugar maple, Norway maple, walnut, catalpa, etc., succeed with a moderate quantity of moisture.
7. Plants in ample quantity are of vital importance to the tree's successful growth. In digging spare not the labor, but secure all the roots possible without mutilation.
8. The top of a tree should not be mutilated. Cutting off the leading shoots is extremely bad practice, only to be tolerated with cottonwood and soft (weeping) maples.
9. Too large a tree should be avoided.
10. Keep the roots fresh and moist by wrapping in wet burlap while conveying them to planting grounds.
11. The larger the hole, the more thorough the care in planting, so much more satisfactory will be the growth and future development of the tree.
12. Grass sod is the deadly enemy of a newly set tree. No grass should be permitted within two feet of the trunk. The grass secures the first water stress after for want of moisture.
13. Digging the holes. A philosopher of the past century said "the ground should be prepared the full extent of the field," which assertion has never been disputed. The hole should never be less than four feet square and eighteen inches deep. The soil, if not a good quality, should be removed and good loam brought to fill the cavity. If of less size, the new roots strike the hard side of the excavation, which they cannot penetrate and are thus turned back, cooling about as in a flower pot. It thus requires several seasons for the trees to secure a thrifty growth. No fresh manure should be placed near the roots, but well rotted compost, well mixed with a friable fertile soil, will produce a surprising growth of tree.
14. Planting the tree. The roots should be spread out in natural position without any crowding and fine earth sifted in from the shovel by a shaking motion, until all the roots are covered and the interstices well filled. When half filled, a bucket of water may be slowly poured in and the whole filled. If the soil is dry and drainage good, the surface may be somewhat depressed to maintain water in dry season. If, on the contrary, drainage is not good, and soil inclined to be wet, then the sur-

THE HORSE

CAVALRY AND BREEDING CLASSES FOR THE FUTURE

Thoroughbred Stallions Being Placed in Canada by National Bureau of Breeding.

BRITAIN REQUIRES REMOUNTS.

BY THOMAS STEVENS.

Horse-breeding in Canada as an industry in the past has been confined to the draught class and a limited number of the harness racing type. Little or no attention has been paid to hunters and jumpers while the thoroughbred, except in a few instances in Ontario is unknown. The future for the hunter and cavalry type, however, appear to be very bright and with a view to its development the Canadian National Bureau of Breeding has been established.

The late autumn of 1907 and the winter of 1908 was spent in organizing the bureau in all parts of Canada from the Atlantic to the Pacific and in appointing secretaries for each province from Cape Breton Island and Nova Scotia to British Columbia. These men as do all others engaged in the Bureau work give their services free of charge.

Nothing was left undone to collect all important data concerning the horse-breeding industry in Ireland and particular attention was paid to the evidence collected by the Commission appointed in 1886, to inquire into the horse-breeding industry in Ireland and to the able speech of the Earl of Dunraven in the House of Lords, dealing with the facts brought out by that Commission.

In the spring of this year some very excellent thoroughbred stallions were secured, some by purchase and some by donation and the new organization was given its first practical test. Bureau stallions placed in Ireland by responsible farmers free of charge, this part of the work being governed by a set of rules in the framing of which simplicity was aimed at.

The first stallion placed in June and from that time until the present December, 1908, there has been nothing but the most unqualified success. In six months the bureau has received over six hundred applications from prominent breeders and farmers in Nova Scotia, Cape Breton, New Brunswick, Prince Edward Island, Quebec, Ontario, Manitoba, Saskatchewan, Alberta, British Columbia and the Yukon. Two hundred of these applicants were selected and the bureau has now signed agreements from everyone of these men without a single exception.

The quality of stallions which are being secured, amazes even the optimists who are carrying on this work. Masterman, for instance, is by Hastings dam Lady Margaret. On looks it is doubtful if he has a superior in Canada or the United States. As a race horse he won the United States Hotel stakes at Saratoga, when a two-year-old and the trying Belmont stakes as a three-year-old. He was bred by Mr. August Belmont at the Nursery Stud in Kentucky. His sire Hastings is at the head of the winning stallion list in America this year. He is the sire of Pricillian and Fair Play now in England and among others of his get are Mizzen, Lord of the Vale and Gunfire. Spendthrift, the sire of Hastings, produced such great horses as Kingston, Lamplighter, Lazzarone, Bankrupt, Stockton and Pickpocket.

Another fine get of Hastings secured by the bureau is Rosemount. His dam was Lady Rosemary by St. Blaise Domitor, Javlin, Melvain, Our Boy, Sea Horse, King, Ostrich, Oraculum, Sunrise, Race King, Johnnie Morgan, Gold Ball and Holmist are others that have been secured.

By the month of May it is expected that some fifty stallions will have been secured for the bureau and that this work will not cease in this direction.

ANSWERS TO CORRESPONDENTS

NOTE.—Not more than one question from one correspondent can be considered at one time. Questions should be specific, clear and concise, and should be addressed to the Editor of the Agricultural Department of this paper. Any person requiring answer by mail must enclose stamped envelope.—Editor.

F. G.—Colt was cut on barbed wire three months ago. A swelling ensued after healing. What will take it down? Ans.—Paint swelling with tincture iodine twice each week.

A. J.—Mare's leg swells when standing in barn but gets better when she is worked. This trouble is generally gradual though at times quite sudden. Ans.—Give the mare her liberty all the time. Don't let her stand in barn except at night.

A. A. P.—A horse five years old lifts his leg slightly for several days. This is accompanied by slight twitching and twisting of the tail. What is a remedy? Ans.—This is a condition of the ciliary, or cranial, nerves. It is a horse box stall or yard to move in at will.

Reader.—A heifer, fifteen months old has a white discharge from the nose. She breathes heavily and coughs occasionally. Ans.—This throat trouble may not be serious, but may be due to tuberculosis. If she does not get well have her tested with tuberculin, if you intend keeping her for milk.

B. G.—Horse stepped on a nail a year ago. Have blistered him four or five times but is still lame. Do not tell the truth to the doctor. Ans.—You do not tell the truth to the doctor more than we presume there is some enlargement above the hoof which may be due to a bony growth. Any good veterinarian can help you out.

Subscriber.—A horse seven years old has an offensive discharge from the nose. What is the remedy? Ans.—The trouble is due to a collection of pus or matter in the sinuses or hollow spaces of the head. An opening should be made in the cavity caused by several causes. The cavity washed out. Your veterinarian will know what further is necessary.

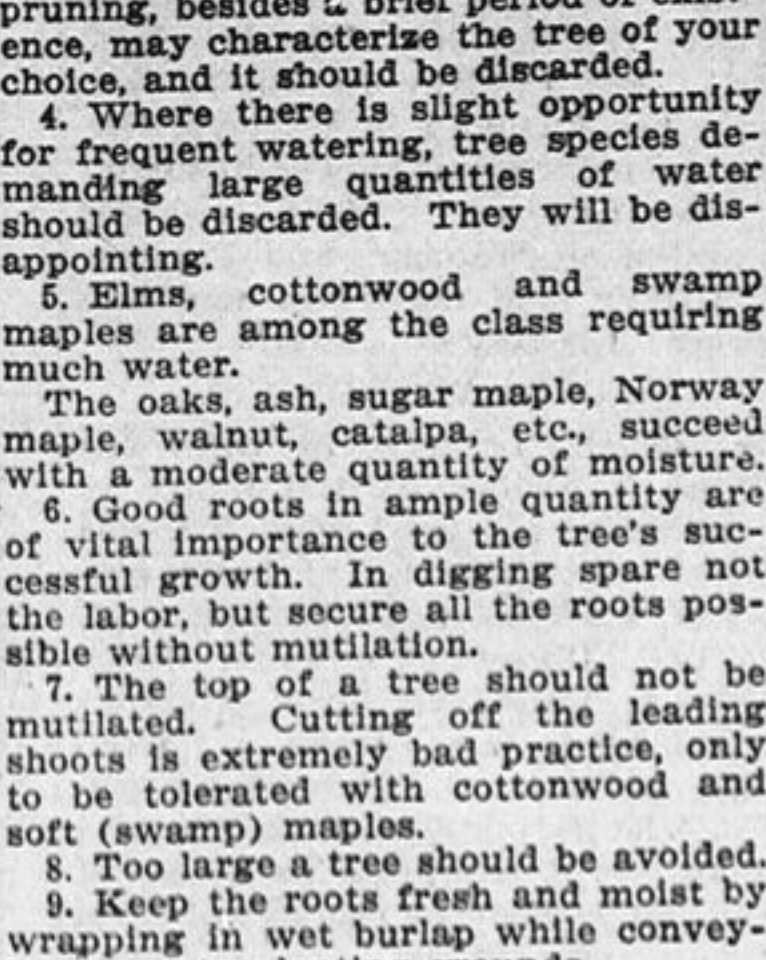
J. M. V.—A mare nearly four years old scours badly when taken from pasture and kept in barn. She is in good flesh, is not worked, but runs out during the day. Ans.—The condition of the bowels was caused by change of condition, feed, etc. A horse which has been at liberty in pasture should not be kept standing in barn more than a point without exercise and should be fed lightly on grain. This is especially true of a horse used for driving.

Subscriber.—I have a colt, six months old, which has a scaly dandruff; also an itching. He wants to rub; the hair is rough. Ans.—A result like this is produced by several causes. The food is sometimes out of the right sort. The skin needs to be curried regularly and kept clean. Then low insects of a certain kind are known to cut an irritating figure here. They must be destroyed.

B. M. C.—I have a horse that has a crack in his front hoof straight up and down. The trouble does not look at all sore, but if the edge of the hoof is pressed the animal winces a little. Ans.—Have the blacksmith open up the crack a little from the front end straight to the toe. Make an opening of about a quarter of an inch and cut as deep as the quick; after this is done poultice it for four or five days; then apply the second poultice and repeat the operation with lard four parts to the entire hoof once a week.

O. J. C.—What will remove warts from my dog's mouth? Ans.—The safest way to remove warts from the dog is to ligate them; removal by the knife usually results in a troublesome sore, or what is better still, a fine elastic cord. The tying should be done at the base of the wart, around its pedicle, and the string must be tightened. This is a sure cure and will cut through in a few days and the growth drops off. The concentrated carbolic acid, without mixture, applied with a brush, destroys the wart, but this should be repeated for a few minutes. After this is done washing will render poulticing impossible.

A. M. I.—I have a Poland-China sow pig seven months old which is in very bad condition. Some months ago her neck was swollen on one side. She had fever and diarrhoea, but she ate and the neck is straight again; but she coughs and vomits frequently, looking very slim, and has not grown a bit since we got her. She has free range of the yard, but she eats buttermilk and vegetables. I have used coppers, turpentine and coal oil, but without any effect. Ans.—A sick hog is a bad prospect. The common cough of hogs is caused by farinos, a cough of the lungs. It is troublesome and often fatal. Among its features are loss of appetite. It calls for bleeding; the pain is the best pain; but to be successful bleeding give purgative cautiously. Epsom salts and sulphur are recommended. Give doses of from two to four drams according to the size of the animal. Treat the animal with a grain of antimonialia six grains nitre half drachm. Cleanliness, warmth and whole some cooling, nutritious food, are likewise valuable in combating this disease.



MISS ALICE DE ROTHSGHILD'S 'WADDESDON STARLIGHT' PRIZE WINNER AT BIRMINGHAM FAT STOCK SHOW.

face about the tree better be raised a trifle that the roots be not in too much water.

A FEW POINTED REMARKS.

You can drive up some hooks in the barn to hang the lantern on a great deal easier than you can build a new barn.

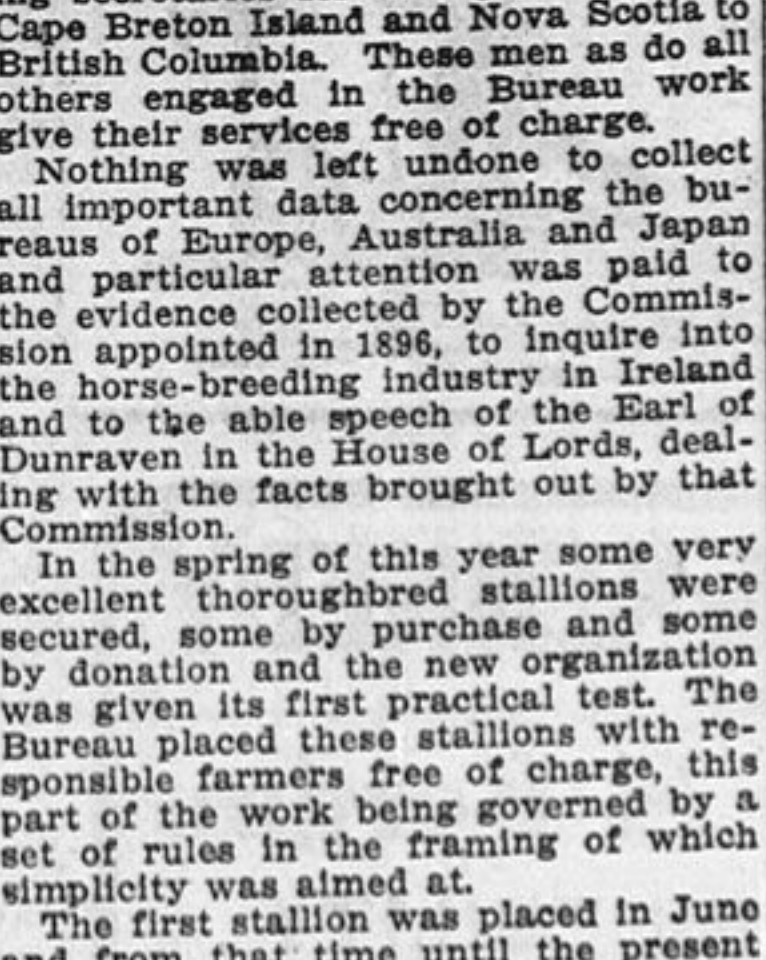
Get your mind made up now where you will have your various crops next year, and do your level best to have the land fitted to the crop. Mistake are costly.

You can grow a better calf by giving it more hay than he in good food and plenty of it, a careful currying every day and being as fair to it now as you want it to be to you by-and-by.

Pinched up, scraggly-wooled sheep never produce nice big lambs. You have got to feed till they are born. No pinchbeck policy will do.

Every time you give your cows a good, thorough grooming you save a few pounds of grain, and that is worth money these times.

It doesn't take a very smart man to run through a good farm in a short time. Where the smartness comes in is in holding that farm right up to the standard and making it bring you in something every year.



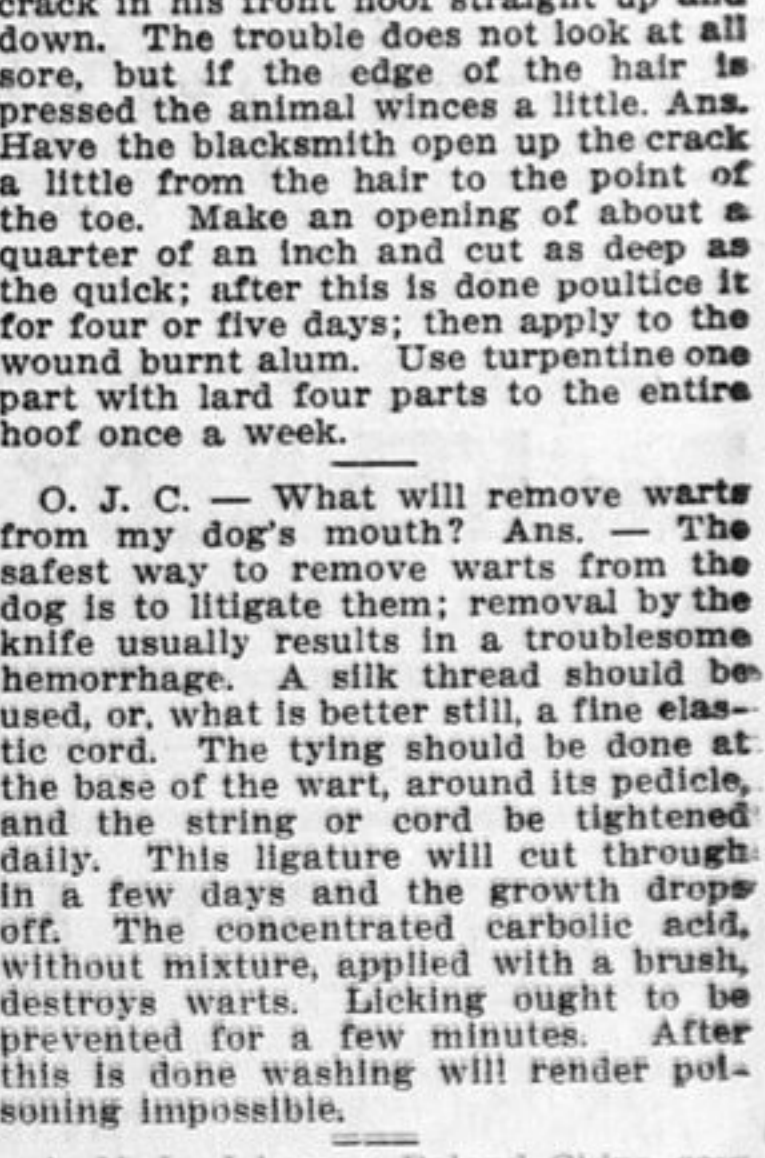
MISS ALICE DE ROTHSGHILD'S 'WADDESDON STARLIGHT' PRIZE WINNER AT BIRMINGHAM FAT STOCK SHOW.

What this bureau means to the country in the future can only be surmised, but those who have interested themselves in the scheme claim there is a ready market for the get of these stallions when crossed with good mares. The British War office has already evidenced a keen interest in the movement and at present has its agents in various parts of the country endeavoring to raise colts which have the warm blood of thoroughbreds coursing their veins. The War Office interest is easily explained when it is stated the cavalry remounts are twelve thousand horses short of a peace footing, not to speak of remounts.

FEEDING OF WORK HORSES.

A writer in Farm Life says:—"Problems connected with the feeding of work horses are doubtless of as wide interest as any problem in livestock management. Practically all farmers, whatever particular branch of farming they may be engaged in, have occasion to feed work horses.

"Whether feeds are high or low in price, it is well worth while for feeders to exercise great care in the selection of rations, so as to use the ones that are most efficient and economical. With the present exceedingly high market prices for all kinds of grain feeds, it is



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especially important that a judicious selection of feeds be made, for much waste may result if attention is not given to this phase of stable management.

"Of all grain feeds used in this country none is in higher repute with horsemen than oats. Many horsemen believe oats to be the best single grain feed for horses, whether kept for draft or for road purposes. It has been stated time and again by practical horsemen and others, that horses fed upon oats display more life, keep in better condition and endure work, especially during hot weather, better than do horses which receive a grain ration made up largely or exclusively of corn. And this belief in the efficiency of oats as a grain feed for horses is so strong with some horsemen that they are willing to pay a prohibitive price for oats, rather than feed corn.

"A study of the chemical composition of corn and of oats fails to show any good reason for the exceedingly high favor in which oats are held, or for corn being considered so totally unfit for the use of horses, especially when at hard work. It has been claimed that oats contain a stimulating principle known as 'avenine' which gives great spirit to horses. The existence of this stimulating principle has not been proved, and it is safe to say that its existence is very improbable. Even if it does exist, there is no evidence to indicate that it would have any special bearing upon the present feeding of work horses."