

Correspondence.

NOTICE TO CORRESPONDENTS.—1. Please write on one side of the paper only. 2. Give full name, Post Office and Province, not necessarily for publication, but as guarantee of good faith and to enable us to answer by mail when, for any reason, that course seems desirable. If an answer is specially requested by mail, a stamp must be enclosed. Unless of general interest, no questions will be answered through the *ADVOCATE*, as our space is very limited. 3. Do not expect anonymous communications to be noticed. 4. Matter for publication should be marked "Printers' MS." on the cover, the ends being open, in which case the postage will only be 1c per 4 ounces. 5. Non-subscribers should not expect their communications to be noticed. 6. No questions will be answered except those pertaining purely to agriculture or agricultural matters.

Correspondents wanting reliable information relating to diseases of stock must not only give the symptoms as fully as possible, but also how the animal has been fed and otherwise treated or managed. In case of suspicion of hereditary diseases, it is necessary also to state whether or not the ancestors of the affected animal have had the disease or any predisposition to it.

In asking questions relating to manures, it is necessary to describe the nature of the soil on which the intended manures are to be applied; also the nature of the crop.

We do not hold ourselves responsible for the views of correspondents.

Stone Drains.—I would like very much to get some information through the *ADVOCATE* on a question that has troubled me a good deal. We have a farm that is very stony and quite wet, land being springy in some parts and mostly steep; cannot be worked properly without ridging high, which is unprofitable, as good crops only grow in middle of ridge. Do you think it would pay to underdrain? I would like very much to use some stone in that way, but don't know how to do so to best advantage. Have made some drains that way and they become filled up after a little. How should stones be laid in bottom of drain? Would it be worth while to leave a passage built over in middle of drain and stand flat stones up against sides? I have read with interest your articles on underdraining, but found no answer to the questions here put. A great part of my land seems to need underdraining, but as it costs a good deal, I would like to profit from your experience and observation in the matter of laying stone drains. The drains have never been made in this neighborhood.—J. T. H., Elgin, Albert Co., N. B.

[Your land needs drainage. In springy places it is usually desirable to dig or bore into the subsoil, and if you find a sandy or gravelly bottom it will make a good outlet. If you can reach such a stratum by digging, dig a hole large enough to afford sufficient drainage; but if you have to bore, several holes may be required. If you dig in a low place, you may either lead drains into these holes or dig more holes in other parts of the field. If you can't get such an outlet, your only plan is to drain in the ordinary way. Where tiles can be had, no other material should be used, as we know of no other method of making a permanent and efficient job. There are two methods ordinarily adopted for making stone drains: 1. Throw a good layer of stones loosely into the bottom of the drain, cover with straw or other material and then fill up with dirt. 2. Build a layer of stones on each side of the drain, and cover with flat stones. The stiffer the soil, the longer such drains will last. The latter method does not pay, for the extra work in digging a wide drain would pay for tiles; but the former method may sometimes be used as a make-shift. All such drains soon fill up and choke, and if you wish to turn them into tile drains, the taking out of the stones makes a lot of work, although the drains may be left, and the tile drains put in fresh places.]

Millers' Tolls.—I wish to call your attention through our valuable paper to the way we farmers are galled by the millers. I know an instance where there was 15 lbs. taken from each bushel of a grist of 19 bushels of wheat, and a refusal to take pay for the same, and a professional limb of the law said he did not think there was any law regulating tolls; it was only a custom. This happened in Ingersoll, and I am informed that it is getting to be a custom in this country where there are roller mills, to take what conscience allows. Now, your

humble servant wrote to a leading paper for information, and for answer it said: 1-12 was the lawful toll, and the law was passed over 40 years ago. Now I want to know when that law was passed, in what year, and if there is a penalty for taking unlawful toll for grinding. I am satisfied that the law was passed over 70 years ago.—W. C. A. C., Ingersoll.

[32 Geo. 3., c. 7, Sec. 3, of the Consolidated Statutes of Upper Canada provides: "That no owner or occupier of a mill, nor any person employed by him, shall demand or take as toll a greater proportion of any grain brought to him to be ground and bolted than one-twelfth part thereof, for grinding and bolting the same, under a penalty of \$40 for every such offence; one moiety thereof to be paid to Her Majesty for the public uses of the Province, and the other moiety to any person who sues for the same in any Court of Record." See Revised Statutes of Ontario, Chap. 113, Sec. 1.]

Bone Mills.—Will you please state in your next number if you know of any cheap bone mills made in the Dominion. The Waterous Co. do not make them. I believe bone dust to be more beneficial to land than any other fertilizer that can be applied, if only a small mill that would come within the means of the average farmer could be obtained. Crops of all kinds were good here last year, roots, especially potatoes, an extra crop, and have kept well through the winter.—J. E., Athol, Cum'd Co., N. S.]

[Mr. Wm. Rennie, of Toronto, sells a small bone mill which he has advertised several times in the *ADVOCATE*. Refer to back numbers. As a rule bone dust or superphosphate is best for most soils in Canada, but it is often desirable to mix it with other fertilizers in order to get the best results.]

Book Farming at the Model Farm.—Professors urge the farmers to educate their boys, teach them chemistry, etc., so that they can take up a handful of soil and analyze it, and tell you what it is fitted to grow; then there will be no failure of crops, the land will yield double or treble the quantity, and fill the pockets with the needed dollar. For the practical see report of the Model Farm, where it says: "We thoroughly underdrained a frog pond at a great expense and summer fallowed it thoroughly, and the following spring sowed with spring wheat; the wheat germinated quickly and made rapid growth for a while, and then died out. We then gave it a good dressing of lime and sowed wheat again the following year with good results." Another lecturer on clover and grasses stated that to be successful in growing clover you must have the field surrounded by old nails. The prevailing idea amongst successful farmers is that to be successful with permanent pasture you must have it surrounded with Government grants.—W. C. S., New Hamburg, Ont.

[Testing soils by chemical analysis has not proved successful for practical results. In some fields a sample from every square rod would be required for analysis, as the character of the soil varies so much, and then the physical character of the soil and subsoil is just as important in the production of crops as the chemical composition. The best and cheapest way to analyze soils is to test different kinds of fertilizers on small plots, and note the results, as has been in the experiments with potatoes as reported in recent issues of the *ADVOCATE*.]

Notes from Manitoba.—I have seen the correspondence in your April number from the pen of R. C. B., Stodderville, Man., and I would like to correct a few of his statements. Your correspondent said barley can be bought for 25 cents, which is wrong; according to Winnipeg market of March 11th, barley was 30 to 40 cents per bushel; oats, instead of 18 cents, were 28 to 30 cents per bushel; and he quoted pork at 44 cents when it is 54 to 6 cents per pound. He also said he was glad to learn from your correspondent that in some parts of our country where prosperity, and its twin sister, contentment, are no strangers, "the deserted farms did not look like contentment." Now I do not wish to say there are no hardships in this country, but who can expect to find anything else in a new country? Look at what Ontario was 50 or 60 years ago compared with Manitoba. I would like to say there are some who have come to this country with the expectation of getting rich by raising grain in one summer, and they have taken up a place and broke 50 or 60 acres, and had to get horses to work it with, also a binder, a seeder, and likely a horse rake and a mower, then his crop is destroyed by hail or frost and he has no money to meet his payments; he then curses the country and leaves it. But my readers must not think this is a common occurrence, as I have been in the country eight years and have seen but two frosts, although there have been three in other parts of the Province. This class is not the farming class, but mostly tradesmen and clerks that have left other parts of the world and come here. Your correspondent says: "Still we languish; how is this? The want of railway facilities. It is neither pleasant or profitable to have two or three days journey to draw your grain to market." Now I do not see why he has said this, as on looking at the map, I find that

Stodderville is within five miles of the railroad, and has been for the last three or four years. Now we have had to draw our grain nearly forty miles until last fall, when the railroad was built in here, and yet we did not grumble. And again he said he did not think it was fair to have to pay \$250 for a binder, when he could get as good a one for \$100. Now any right-thinking man would not mind paying a revenue to help to build railroads through every settlement in the country, which the C. P. R. is doing as fast as it can. The farmers are nearly through seeding in this part. Wheat is up in most places. We have a fine country here, and lots of good wood right at hand, and water that cannot be surpassed, with all kinds of soil, from a black clay loam to a black sandy soil.—C. G. C., Treherne, Manitoba.

Killing the Potato Beetle.—Will you kindly give full directions how to use Paris green on potatoes, or say if there is any other remedy to apply to kill the potato bug? I had a small patch of potatoes totally destroyed last year.—A. B., Lower Wentworth, N. S.

[Paris green is the best known remedy; but hand picking, if done early in the season, is an easier and cheaper method of destruction. A few beetles picked early in the season will prevent the breeding of thousands. We use about a dessert spoonful of Paris green to a tubful of water, and sprinkle with a watering can.]

Clover for Seed.—Will you please let me know through your valuable paper how long clover should be pastured that is going to be kept for seed, and whether pasturing or cutting first crop early is the better?—SUBSCRIBER, Petrolia.

[Red clover may be pastured till about June 10th, when it should be cut by a mowing machine, so that it will grow up regularly and evenly. It should not be eaten off so bare that it will not need mowing. With alsike clover, however, there is a risk in pasturing it much. The best plan we have seen in getting seed from it is to sow it with timothy, and when the clover is ripe, the timothy yet being in bloom, the whole may be cut and threshed, whereby you get clover seed, and the remainder makes excellent food for stock.]

Castrating Vicious Stallions.—Have a horse four years old, a stallion, and find him a nuisance this season of the year. He is also bad to his mate, and when left alone in harness. At other seasons he is very quiet, no trouble, and is inclined to be lazy. Do you think if he was castrated he would be still slower? How long would he have to be idle? Although not a picture himself, the stock he gets are perfect beauties. He is bred from heavy draft on both sides.—C. D. L., Dakota, Lenox, Man.

[Castrating your stallion would tone him down somewhat and make him less mischievous. He would likely be steadier in the harness, and less fiery. You should let him rest about a week in an open field after the operation is performed.]

Raising a Show Calf.—1. We have a steer calf three weeks old. Would you please let us know how to feed it? We are raising it for a prize fair, which is to come off three years from next fall. Would it be better to put meal in its milk, and what kind? Would it be better cooked or uncooked? Should it be put out on grass this summer or not? Should it be kept in a warm place in winter? 2. We have lost several calves with the black leg. What would be good for it?—J. A. S., Kempville.

[1. Let the calf suck the dam, or give it new milk three times daily, and keep it in a small pasture during the day, putting it in a roomy box stall at night. After it is three or four weeks old, put some oatmeal, mixed with a small quantity of bran and shorts, into a trough where the calf can have free access to it, but never feed it with milk or any other liquid, and it should not be given immediately before or after drinking. A small quantity of corn and pea meal will come useful for a change, and after the calf is two or three months old, a small quantity of oil cake may also be given. The food is better uncooked, and if the calf does not masticate it well mix the meal with coarse food, such as cut hay, and, in winter, roots. Always watch the calf's bowels to see that they are in good working order, and regulate the food so as to avoid the use of medicines. Keep it in a moderately warm place in winter, but let it out an hour or two every mild day for exercise. Give it plenty of grass in summer, and if you give it meal regularly, it will not likely gorge itself. 2. Black leg (also called anthrax, charbon, splenic apoplexy, etc.) is mainly caused by turning poorly fed animals suddenly on luxuriant pasture, and is contagious by inoculation. Remove the cause, as there is no certain cure when it assumes the fixed form.]