

## Correspondence.

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## How to Make a Hot-Bed.

SIR,—How can I make a hot-bed under glass, and what degree of heat must be maintained? Please answer.

J. W., Strathburn, Ont.

[An exchange gives the following concise directions for making a hot-bed: "Some gardeners make hot-beds by building a mound of manure on top of the ground, but I prefer a pit, as I think it holds moisture better. Select a place where the ground lies fair to the sun and slopes to the south and east. The north side of the garden, if the ground lays right, is a very good place. The fence opposite the hot-bed should be six feet high and made tight to keep the cold wind off. The pit should be three feet wide, fifteen inches deep, and as long as the needs of the gardener may require. After the pit is dug it should be filled full of fresh horse manure well mixed with straw, or better still, forest leaves, which should be put under the horses and trampled well into the manure. In filling, shake the manure up well as it is forked into the pit, and then tramp solid as soon as you have six inches deep in the pit; continue in this way until you have the manure several inches above the level of the ground, then make a frame of inch boards, three feet wide and ten inches deep on the front side and sixteen inches on the back side; set the frame over the manure, and fill up outside with the dirt taken out of the pit, nearly to the top of the frame all round. Then if the manure is pretty dry, pour on several pails of warm water and cover with the glass right away, and leave it two or three days, till the heat begins to subside, then cover with soil six inches deep; 70° to 80° is the required heat. This soil should be rich and mellow and dry enough to crumble easily. Then in a few hours, if the sun shines, your bed will be ready to plant.

"If any one wishes to make his own sash, he can do so by following these directions:

"Take a strip of soft wood two inches wide, cut the side pieces six feet long and the cross pieces three feet long, groove the cross pieces with a small groove plane on both edges, so as to hold the glass, halve the ends of the cross pieces so as to fit down on the side pieces; then with some inch screws fasten on one end piece, then put in one row of glass and fasten on the next cross piece, and so on until it is finished. By this method the glasses are held firmly in their places and can be removed by simply loosening one screw in each cross piece.]

You are very punctual in answering questions, enabling every farmer to be his own doctor and veterinary, which alone is worth many times the subscription. Where would you advise a man with a small family to invest \$3,000 in a farm?

S. S., Delta, Ont.

[This is a very delicate matter to advise any person upon. There are good opportunities in almost any part of the Dominion.]

SIR,—Can you, or any of your readers, inform me which is the best class of cattle to raise working oxen from? Fast walking oxen is what we want. Which is the best way to break them in, single or double; in traces or in yoke? If in yoke, what distance from bow to bow would you give between the oxen, as we make all our own yokes and harness? Yours truly,

J. M. B., St. Paul.

[The Devons or Grade Devons are the most active and make the best working oxen. Break them in to double yoke during the winter. The distance between the bows will depend upon the size of the cattle. They should be just close enough together to work well without crowding.]

SIR,—I bought two pigs last October which are now about four months old and growing well. They are kept on my employer's farm, and I am experimenting to see if any profit can be realized by selling them about next August. Can you inform me what is the best food to buy for them, which will in the end turn out to be the cheapest? I think barley meal at \$1.25 per 100 lbs. is too dear to make any profit. Would bran do just as well, or what would you advise? How much capital would be required to rent a 50 acre farm? Kindly answer the above and you will oblige.

A SUBSCRIBER, Strathroy P. O., Ont.

[It will depend altogether upon the prices of the different grains from now to the time your feeding will finish. Corn or cornmeal, peas or peasmeal will be the cheapest. Use your judgment. It will take about the same machinery to work a 50 acre farm as a 100 acre farm. The capital required would be from \$800 to \$1,000.]

SIR,—Please inform me through your paper how to raise apple trees from the seed, and at what age they should be grafted. I have heard people say that a flat stone should be put under the roots when they are planted. Whether this is right or not I do not know. J. S. M., Bayview, P. E. I.

[Apple seedlings should be root-grafted at a' out two years old. There is no virtue in placing a stone under the trees, excepting drainage, and there are better methods of draining than that.]

SIR,—I have a Durham heifer that has a calf, and she does not give enough milk for it. She has the best of milk producing food that can be obtained. Would a farrow cow's milk, added to the new milk, be any benefit to the calf? What kind of meal would you recommend to mix in the milk, and how much? R. E. T., Brownsville, Ont.

[Would not give milk from a farrow. The milk from a cow that has calved recently would be preferable. Boiled oatmeal with the addition of a little linseed meal will be the best. If you have plenty of rich milk very little meal will be required till later.]

SIR,—I have two hives of bees in the old fashioned box hive, which I intend to transfer next spring to the movable frame hives. They are the first of the kind that I purchased. The bottom board is nailed on firmly, and what I wish to know is how can they be cleaned out with the bees in them, or if they are a good kind of hive? Perhaps you or some of the readers of the ADVOCATE would kindly answer the above. 2. I have a cow 5 years old in spring that never raised her calf. She lost it about the same time each year, for three years back, and do not know of her getting any hurt to make her lose it. Is there any remedy for her, as she is a fine animal? 3. What is the best feed for young colts the first winter? Some people tell me they should be fed very little oats; if so what is best for them? G. G. McK.

[1. Perhaps some of our readers who are interested in bee-raising will give the desired information. 2. The best thing you can do with the cow is to feed her up for the butcher. 3. Colts should be fed oats, but in limited quantities; they can be given scalded or boiled occasionally.]

SIR,—I see in the ADVOCATE you have the Concord Grape for a premium. I have seen it stated in some farming journal that it is perfectly hardy. Do you think it could stand our winters without protection? Sometimes it is 30 degrees below zero. Have you had or do you know of any who have had experience with it to that extent? I do not know of any grape vines in this neighborhood but one (a Clinton), and that is killed to the ground every winter with or without protection. I should be glad to receive some information on that point. VERDANT, Stanley, N. B.

[The Concord Grape is certainly the hardiest variety we have in this country, but whether it would stand such an excessively low temperature as you state, without protection, is doubtful.]

A subscriber asks THE FARMER'S ADVOCATE to give the plan and details of a brick root-house to be frost proof. "If one has lots of cash the problem of building is easily solved—but to combine comfort and durability with economy is what we want." We should be pleased to receive plans from any of our experienced readers. Pencil sketches, if plain, will enable us to present the engravings.

SIR,—What is the best way to work an orchard that has been standing for a number of years until last fall, when it was broken up. Would it do well to sow oats on it in the spring and cut them green? Could any composition be put on sleepers that are over a root house under the barn, to prevent them from rotting? By answering these questions you will oblige.

D. McK.

[Sowing oats, as you suggest, will be the best and lay the orchard down with orchard grass. A good coating of tar or creosote; the latter will probably be too expensive.]

SIR,—As you always kindly answer questions, I have been encouraged to ask you these questions concerning fences: Was there a law passed compelling a board or pole to be put on top of wire fences? I think that a pole on top is more dangerous than if there were none at all on, as horses would have a chance to plunge over it the same as a rail fence, and get their feet over the lower wires. I think that the pole ought to be placed under the top wire. When I came on this place the fences were very poor, and my cattle got into my neighbor's meadow. I put up a four-wire fence, and they have not been in since. One of my neighbor's horses jumped it and was scratched some. Can he compel me to change or put a pole on it? The fence is not on the line and it runs in a zigzag way. He has land that belongs to my place, which he held by possession when I bought it. Can he compel me to build a fence in this crooked way, or can I have the line run and put the fence on it without his consent? By answering these questions you will confer a favor on an old subscriber.

E. B., Brockville, Ont.

[A bill was brought before the Ontario Parliament to make it compulsory to have a board or pole placed on top of a wire fence; but it never became law, the bill being withdrawn. You had better consult a lawyer; probably your neighbor has, by the Statute of Limitations, become the owner by undisputed right.]

SIR,—I am better pleased than ever with the paper. The wheat crop in this county was rather light last season. The best wheat seemed to be the Lost Nation variety; the five did pretty well, but the spring being so late, there was none a full crop. H. S., West Cape, P. E. I.

SIR,—How can I kill or keep down the suckers of lilac trees? I have cut them off close, and, in fact, dug down and cut repeatedly, so that I was afraid I would kill the tree.

C. N., Northport, Ont.

[The only effectual remedy will be to remove the roots upon which the suckers grow.]

SIR,—What would you think of the idea of attaching a threshing in place of a binding appliance to the harvesting machinery for this country. After five years of experience in farm life here, I am of opinion it would answer well, for reasons which I will try to make plain: Our country is generally level and dry, allowing us to sow our fields all at once, therefore ripening the same way; then we do not want the straw, so that the heads of the grain with very little straw would have to go through the machine; of course, we would need more power, but by leaving off the binder and substituting the cylinder, the weight of the machine would be about equal. I have found the difficulty of getting our threshing done here in proper time to be one of the greatest drawbacks which I have experienced. A great many may hold that the grain will not be dry enough, and not fit to be carried to the granaries. Now I think there is more soft grain by bad stacking than there would be by threshing at once; then there would be no more help required than we would have in our harvest field, say three men, which would be a great saving of expense and trouble, as well; having but very little rain in the harvest time, we could leave our bags out until we had got our field cut.

J. B., Morris, Man.

[This is no new idea; machines called Headers are extensively used on large farms in the Western States, and on the Pacific coast, Oregon and California.]

SIR,—Where can I obtain the Report of the Agricultural Commission or Arts Association?

J. B.

[Apply to Henry Wade, Esq., Toronto, Secretary of the Association.]