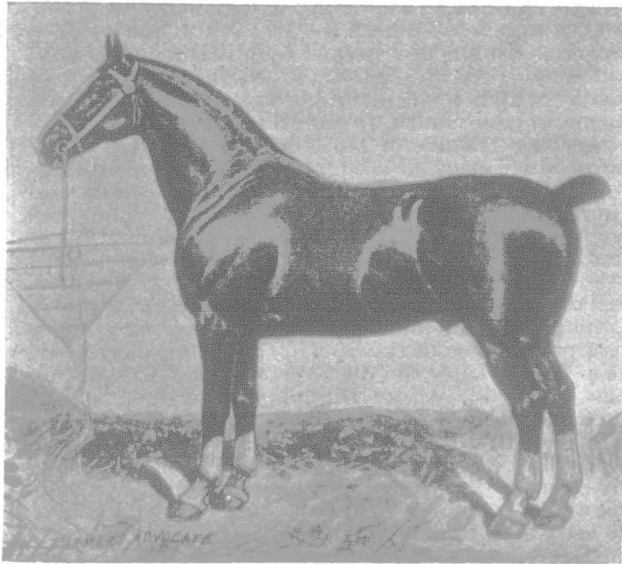


Bees in Manitoba.

To the Editor FARMER'S ADVOCATE:

To bee or not to bee? That is a question that should be decided about this time of the year. Doubtless some will decide in the affirmative this spring, to whom these notes may prove helpful; perhaps they will influence others to decide in the same way, for whatever is said here is intended for the man who would like to start an apiary, but does not know how. A good idea would be to get, at once, some good book, such as "A. B. C. of Bee Culture," or "Cook's Manual," and read up something on the subject in advance. Such a book is always useful and will continue to be consulted by the beekeeper even after years of experience.



HACKNEY STALLION, ROSADOR 4964.

THE PROPERTY OF MR. F. W. BUTTLE, RILLINGTON, YORKSHIRE. WINNER OF CHAMPION PRIZE 1899 AND 1897, AND RESERVE FOR CHAMPION 1898, LONDON HACKNEY SHOW.

The best time to purchase bees is in the spring, say about the middle of May. Those who have stock to sell should know it by that time and be advertising. It is possible, too, by that time to tell the colony that is worth having from the one that is not. Having secured a hive of bees, place it in a position where it will be sheltered from the winds, especially from west and north winds, but where it will get the morning sun. It might even be made to face the east, for bees like to be out early; and should be raised two or three inches from the ground. Have a board or shingle sloping up to the alighting-board at the door of the hive for the convenience of too heavy laden bees, who often miss the door and drop in the grass. Low trees or shrubbery make the most desirable shelter, as, if there are very tall trees about, the bees, when swarming, are apt to cluster in them and cannot be secured. If no such shelter is at hand a close board fence may serve the object, but an apiary on the open prairie, without any shelter, would scarcely prove a success.

A correspondent asks "How to make a bee-hive suitable for Manitoba?" With a hammer and nails is a good way, and, of course, a saw to cut the boards. Any of the hives in general use in Canada are suitable for Manitoba, and as one purchasing a colony of bees gets the hive and combs with it, this will serve as a model by which any man or boy handy with tools may make his own. For the beginner, who should work for extracted honey, the "Jones" hive is good enough. This is a box 15 inches deep, 12 inches wide and 18 inches long, inside measurements; holding, when full, twelve combs, which are placed crosswise. Above this is placed, to serve as an air chamber in summer, a super or second story, 4 or 4½ inches deep, the same size as the hive. The cover is water-tight and made to fit over the hive. If comb honey is wanted such a hive as the "Langstroth" would be preferred. The body is much smaller than that of the Jones, and is intended to serve only as a brood chamber. When this is full a super is put on, in which the sections are placed. The Jones hive is not so suitable for comb honey production, as the body of it is so large—that having to be filled before the bees will work on the sections in the super. These hives are made of inch lumber, dressed on both sides, and may be had "in the flat," ready to nail together, from any dealer in beekeepers' supplies.

When purchasing a hive of bees, four or five pounds of comb foundation, of a size suitable for the hive, should also be procured; also a couple of dozen comb frames, unless it is preferred to make them. Then a veil and gloves will be necessary, and a smoker may also be found to be useful. Of course empty hives must be provided and kept ready to receive swarms. The hive, when first obtained, will probably not contain more than eight or nine combs with a division board behind them. These should be well covered with bees, and more or less filled with brood. If the bees cover all the combs and the brood is hatching, put in frames fitted with comb foundation till the hive is full, moving the division board further back each time to admit them, and finally removing it. These remarks apply to Jones hives. About this time a number of queen cells will be found on the combs. As these thimble-like structures reach the sealing-up stage prepare for a swarm. Have a hive ready with three or four frames with comb foundation in them. By this

time, too, every neighbor who used to keep bees twenty or thirty years ago will be on hand with some device for making the swarm alight or come back to the hive—tin pans, spray pumps, and even shotguns will be recommended. But about as good a thing to do as any is to sit quietly down and watch them till they cluster, which they will do after a few minutes, most likely on the branch of some tree near by. The branch should then be cut as quickly and quietly as possible and taken to the hive. Care must be taken not to shake the bees off, and if that can't be avoided the branch must be held in its place till they cluster again, when it may be carried down. The swarm may be shaken into the hive and the cover put quickly on, but the better way is to lay it on a board at the front of the hive. The bees will very soon find the door and run in. As one gets acquainted with the work he may prefer swarming his bees artificially, which can be done by following the directions contained in the books mentioned above. The next thing to look out for is after-swarms. One, two, or even three may be thrown off, till it begins to look as if the old stock had gone crazy. Even one of these is not desirable unless swarming has begun very early. They seldom attain a good wintering strength, but usually have to be doubled up and fed in the fall. At the same time they are a ruinous drain on the strength of the parent hive. So a good way to treat them is to capture the swarm and lay it at the front of an empty hive; then lay yourself alongside and keep your eyes open for the queen. When you get a sight of her capture her and end her reign right there. In a short while the swarm will discover that it is not so well equipped for housekeeping as it thought, and promptly return to the parent hive. Let the bees increase as rapidly as they can, but keep down the number of hives. A well-filled hive, in the honey season, is profitable, but two half-filled hives are a dead loss. Let no beginner forget that, and they are all apt to do so. J. J. GUNN.

Red River Valley.

Root Growing.

Select a piece of land as near the stables or yard as possible for convenience sake, so the roots can be pulled and thrown over to all stock in months of August and September when pasture is scarce. Plow the land in fall as early as possible, and harrow well to start weeds; then, after all fall plowing is done, draw out and spread evenly a good coat of well-rotted manure. The rough surface after manure is on ground causes the snow to lie all winter, giving plenty of moisture to start roots early. As soon as snow is all gone in spring and frost out of the manure and ground, give it a good harrowing, so as to break the manure all up fine, and then plow as soon as you can get down about ten inches. By plowing deep the first plowing, you get the manure down so the scuffler don't drag any of it. Harrow down fine immediately after plowing, leave a few days, and then harrow again. You will find when you come to single the plants the benefit of having the ground real fine. You will also notice that the plants come ahead quicker than where it is lumpy ground. If many weeds are coming, plow again about four or five inches, and harrow well again; then roll and drill up and sow before the ground dries out; don't make drills too high; about thirty-two inches apart I generally sow mine. Don't sow all at once, unless you have plenty of help to weed and thin them. Don't put off until all other seeding is done; rather leave your oats or barley a day and sow your roots. I sowed mine last spring as early as May 2nd; then some on May 9th; the earliest were the best. Some prefer sowing them on the level. I don't; they are far easier to scuffle and also to thin. Sown on the level they are much harder to get up in the fall. Thin before the plants get too big. Turnips, 12 inches apart; mangels, 15 inches—mangels won't stand crowding.

Turnips are certainly a necessity and are very cheap feed. My young calves and yearlings scarcely ever drink water, and they are fat and with slick hides. Try some mangels for the milking cows, and field carrots for the horses and young colts.

Langford Municipality, Man. J. B. GOVENLOCK.
[NOTE.—Unless the land had previously been deeply worked, it would not be safe to plow as deep in the spring as Mr. Govenlock does, as it would turn up a lot of raw subsoil. If this were done in the fall the results might be safer. We think frequent surface cultivation with harrow or cultivator would be better than the second plowing recommended. In most soils a second (shallow) plowing in newly-turned land would be an impossibility, especially with manure turned under in the first plowing. In most districts level cultivation is considered best, as it is not so favorable for the evaporation of soil moisture—a most important consideration in this western country.]

The results obtained by Mr. Govenlock have been most satisfactory, his field of turnips being the best as to yield and quality of roots the writer came across last fall.—ED. F. A.]

The winter is prolonging its stay, considerable quantities of snow having recently fallen in nearly all the Provinces of the Dominion, so that in most sections farmers in the East are enjoying the use of good sleighing in the last days of March and are well pleased to have their crops of wheat and clover protected by a blanket of the beautiful, which is so much more favorable than to have them exposed to the cold winds and alternate freezings and thawings which usually prevail at this season.

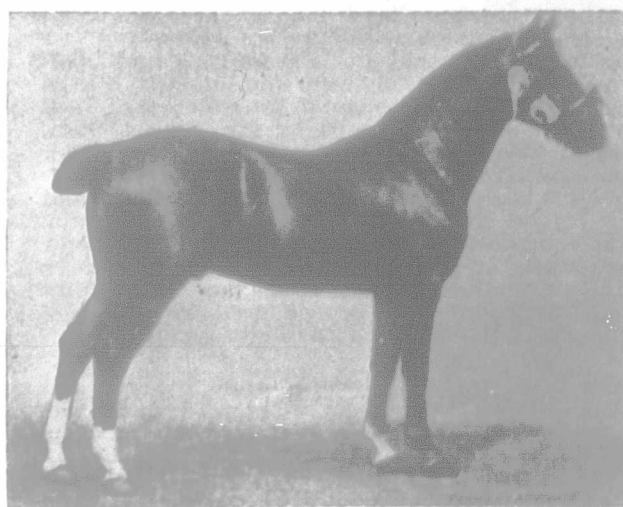
Our Country Schools.

On driving through this vast country, one cannot but notice the deplorable condition of our country schools. There are so many reasons why our schoolrooms and school grounds should be beautiful that one wonders why there is an unpainted schoolhouse, a bare wall or untidy playground in our land. Have we not interest enough in the children to try and improve their surroundings, where they have to spend six hours a day, and five days in the week, the early part of their life? Expense, in these days of cheap material, cannot be brought forward as an excuse.

The love of beauty cannot be inculcated in children too early. First impressions are the most lasting, and it is surprising how early in life a child will discriminate between the beautiful and the commonplace. Many of the children come from homes where they have none of the beautiful surroundings which mean so much in developing the aesthetic nature of the child. It is the duty of the district to see that the children have such surroundings. Think of the refining, softening, inspiring influence beautiful surroundings must have on the children. Tennyson says, "I am a part of all I have met."

Now, I will say something about the school grounds. The school playground is as vital a necessity as the schoolroom. A pleasant, shady space for rest, story-telling, and quiet games—room for ball games, racing, etc. But here is what we generally find: An acre or half an acre of the roughest land to be found, the schoolhouse as near the center as possible, no fence, no shade trees, no playground, nothing beautiful. Instead of this, there should be two acres of land, with the school setting well back, so there could be a good playground in front. As I said before, the school playground is a necessity. Work and play, two kinds of muscular exercise, are both important. "All work and no play makes Jack a dull boy." A person will teach a very short time before he will see how much more readily pupils go to work after having a good game of ball or other exercise than when they have been sitting around the schoolroom during recess. There is a great training in play that children cannot get from books. The older boys and girls must understand how to respect the weak, must know the meaning of honor and fairness, law and order.

It is necessary to have the grounds large enough so that they can be fenced, trees planted, and still not interfere with the playground. So I would advise all school districts which haven't at least two acres to secure as much at once, while land is not so valuable as it will be in a few years. Then put a good fence around the school lot. The teacher will see to the tree-planting. Just give the teachers a chance and you will see how anxious they are to improve the opportunity. Then you are ready for planting trees and flowers and otherwise decorating the school premises, in which you will find the teacher and children only too willing to help. "But we have no flower-beds," you say. This is where the teacher and children will come in. All teachers know that there is nothing will add to or take from the interest and joy of the children in their school life so much as the beauty or "barrenness" of their surroundings. Make the school grounds beautiful. Do not let your school have that forsaken appearance so often seen in passing the school plots of our country. Surely Manitoba's boys and girls deserve better at our hands than to be compelled to pass those formative years of their lives in sightless surroundings. All their future will be affected by the impressions made on them



HACKNEY STALLION, ROYAL DANEGELT 5785.

THE PROPERTY OF SIR WALTER GILBEY, BART., ELSENHAM HALL, ESSEX. CHAMPION IN 1896, AND RESERVE FOR CHAMPION IN 1899, LONDON HACKNEY SHOW.

during their childhood days. See to it, then, that these impressions are of a kind which will produce courageous, loving, sympathetic men and women.

It is a very easy matter to fill a bed with mould from neighboring fallow and in it cultivate our wild plants and other garden flowers; and how many lessons can be taught from these flowers, in addition to the never-ceasing influence which the presence of their beautiful forms would have. Children would thus learn to love nature, and this love would become a vital element in the development of pure, high character.

Southern Manitoba. "AN OLD TEACHER."