

## GARDEN AND ORCHARD.

## Mistakes of the Tree Planter.

We will mention only in a general way the many mistakes made by the tree-planters in choosing wrong varieties or a bad location or buying trees from irresponsible parties, or a number of other things which might properly come under the head of tree-planting, but will confine our remarks to the common errors committed by the usual tree-planter in the actual work of planting the tree.

*First.*—It is a mistake to dig a hole so small that you have to crowd the roots all up together, and set the tree the same as you would a fence post.

*Second.*—It is a mistake to dig a hole, either large or small, and throw out the top soil down to the subsoil and leave it unbroken, then set the tree with roots on a surface nearly as solid as a board, and then expect the young tender roots to penetrate and grow and the tree to thrive.

*Third.*—It is a mistake to set a tree very much deeper than it stood in the nursery row, except it be dwarf pear trees.

*Fourth.*—It is a mistake to plant a tree and not prune off all broken and bruised ends of roots with a sharp knife, cut from the under side. The roots smoothly cut off will callous more quickly than if left as they come from the spade or digger.

*Fifth.*—It is a mistake when pruning the roots not to examine and take out all borers, and cut off all roots affected by woolly aphids.

*Sixth.*—It is a mistake not to spread out all the roots in a natural position, slightly inclining them downward.

*Seventh.*—It is a mistake not to put the best soil around the roots.

*Eighth.*—It is a mistake to put any manure around the roots. If soil is thin put fertilizer on top of the ground and let the rain wash the fertilizer down to roots.

*Ninth.*—It is a mistake not to firm the soil down solid so as to exclude all the air from the roots as well as to pulverize all clods.

*Tenth.*—It is a mistake after shortening the roots, which cannot be prevented in transplanting, and thereby lessening the tree's capacity for absorbing moisture from the soil, not to cut back the top to correspond with the roots, to make less leaf surface, which exhausts the tree by evaporation.

*Eleventh.*—It is a mistake to plant a tree in sod and then replace the sod close around the tree to keep from disfiguring the lawn, as we often see done in town lots. Turn the sod over and let rot. Allow no grass closer than three feet of a tree planted on a lawn.

*Twelfth.*—It is a mistake to plant a tree in the mud or put much water around the roots. Have the soil dry enough, if possible, to crumble or else it will bake.

*Thirteenth.*—It is a mistake to lean a tree in any direction. Plant as near perpendicular as possible. All trees that are growing at an angle will be found with the new growth nearly all on the top side—nature trying to straighten the defects. Proof of this, go into the forest and observe the leaning trees.

*Fourteenth.*—It is a mistake to plant a tree with the idea that you are going to die before it bears fruit, and that you will not get any benefit personally. *What if you do die,* can you erect a better monument to the labor of your hands? One of my salesmen told me once that he fully believes one-half the people whom he approached on the subject of buying trees never thought of dying until they were asked to buy a tree, then they invariably replied: "Oh, no, I am too old; I will die before they bear."

*Fifteenth.*—It is a mistake to plant a tree and forget you are dealing with and handling a thing of life, and while it is inanimate, yet it has a living organism that will respond to kind and generous treatment as quickly and surely as your live stock show the effects of good feed and grooming.

Whenever the writer plants a tree he fully expects it to grow, and is surprised only when it fails to do so. Many planters seem to be surprised when their trees live. Have faith in your work and use the same good sense and judgment in your tree-planting as you do in your other lines of work, and mistakes will be the exception, not the rule, and success will crown your efforts. Thanking you, I close.—*H. W. Jenkins, in Report of Mo. Horticultural Society.*

## How to Grow Large Strawberries.

Select plants of large varieties and choose large plants. Allow no other plant to grow within twelve inches of them. All within that distance destroy by hoeing up shallow, so as not to disturb the roots of the plant referred to, or these plants may be killed by putting enough mulching on them to smother to death. Water with liquid manure. This liquid can be made by putting manure (poultry manure) in a barrel or trough; then pour on water to reach through the manure; place two tin cans, one on each side of the plant, filled with this liquid, the cans having little holes punched through the bottom to allow this liquid to run slowly through. Fill the cans about every third day. Thin or cut off fruit stems, leaving two of the strongest. When berries are about one-fourth grown, pinch off all berries, leaving only three or four of the largest to mature. I assure you that you will have berries that you will be proud to place on exhibition. JACOB FAITH, Missouri.

## QUESTIONS AND ANSWERS.

[In order to make this department as useful as possible, parties enclosing stamped envelopes will receive answers by mail, in cases where early replies appear to us advisable; all enquiries, when of general interest, will be published in next succeeding issue, if received at this office in sufficient time. Enquirers must in all cases attach their name and address in full, though not necessarily for publication.]

## Veterinary.

## WARBLES IN CATTLE AND GRUBS IN SHEEP'S HEADS.

In the *FARMER'S ADVOCATE* of 1st April last enquiries appeared under above heading asking for a cure, and as we have had difficulty from both these sources on the farms of the F. W. Stone Estate, Guelph, the writer's attention was attracted. An effective cure for warbles and for grubs in the head of sheep was found in McDougall's Sheep Dip, which is absolutely non-poisonous to cattle, sheep, or live stock of any kind, while it destroys all insects that live on animals by its action on the pores of the skin of such insects, all of which breathe through their skin.

The solution of McDougall's Dip to apply when the cattle are on pasture to prevent the attack of the warble fly is in the proportion of one part of dip to twenty parts of water, applied as a wash on the backs of the cattle and allowed to dry on. This should be repeated occasionally while flies are prevalent. If the lumps have appeared, showing that the warble grub is developing, a couple of applications of this solution will destroy them.

The same solution of dip will prevent the attack of the bot fly, which lays its eggs in the nostrils of sheep and causes the grubs described by your subscriber, and if the grubs have developed it will kill them, and save the sheep without injuring them in any way. This year two of the sheep on the F. W. Stone Estate farms died from these grubs before the foreman discovered the cause by dissecting the heads of the dead sheep, when he found the grubs. A number of the other sheep showed the same symptoms of sickness, but were promptly cured by dipping their muzzles in the above solution of dip for twenty seconds, two or three times. The whole flock were treated in this way, and all sickness stopped at once. F. W. STONE ESTATE.

Wellington Co., Ont.

## INJURY TO CORNEA.

S. COURTNEY, Muskoka District, Ont.:—"I have a horse with a bad cut near the corner of the eye. The eyeball is injured also, but he can see. Now a thick white scum is forming over. What can I do for it?"

[Wounds of the eyelids are to be treated in a very conservative manner. Nothing must be destroyed. The edges are to be secured by silk or silver wire. The film, or, as you term it, the scum, which forms over the front of the cornea consists of an exudate which continues so long as the irritation lasts, but gradually disappears by absorption. Many think that it is necessary to destroy it by caustics, as if it were an outer skin which had grown over the eye. This is a popular error. The deposit is within the structures of the cornea, and until the inflammation has subsided all irritating substances are calculated to do harm. We recommend warm fomentation, and afterwards the application of the following lotion, which is slightly caustic and stimulating: Nitrate of silver, 20 grains; distilled water, 2 ounces. Apply a few drops night and morning to the outer corner of the eye. DR. W. M. MOLE.]

## WOUNDS ON MARE'S HOCK.

W. F., Jr., Grey Co.:—"I have a mare seven years old that was kicked on the hock last August. The cut was about four inches long and looked as if the skin was off. It healed all right, leaving the joint a little enlarged and swollen, but to my surprise, when I went to the stable I found the wound had opened the full length of the whole scar without apparent reason. She is with foal, and her time is up in about two weeks. Please let me know the cause and what to do?"

[It seems difficult at first to account for the scar being reopened after nearly eight months, but our opinion is that it must have been bruised when lying down and is probably not so severe as you describe. By the time this reaches you it will be a good deal better looking. A simple form of cooling ointment would be suitable for such a case: Lard, 2 ounces; boracic acid, 1 ounce; oxide of zinc, 1 ounce. Apply night and morning. DR. W. M. MOLE, M. R. C. V. S., Toronto.]

## COW WITH A COUGH.

C. C., Simcoe Co., Ont.:—"I have a Holstein cow, that I bought about a year ago, with a bad cough. She coughed a little last summer, but through winter and this spring coughs very hard, but otherwise is quite healthy. We notice that some of the other cattle are beginning to cough a little. Please can you tell us what is wrong and give remedy, and oblige?"

[While the cough may be the result of some throat irritation, the symptoms described lead us to fear that tuberculosis may be the trouble. In order to be sure we would suggest that a competent veterinary surgeon who has had experience in administering the tuberculin test be called in to test all the animals that are coughing, and if they respond have the case of long standing destroyed and given a post-mortem examination. The result will help to decide as to the condition of the rest of the animals. It might be well to apply to the Agricultural Department at Ottawa and learn on what conditions they will test the herd.]

## SPRAINED TENDONS.

JOS. WILLIS, York Co., Ont.:—"What is best to do with a horse that was lamed with drawing a load over a manure pile, straining the cords on the inside of hind leg above hock. The soreness has left, but there is a callous lump seemingly on the cord?"

[If you have not already had your horse fired and blistered we would certainly recommend the operation at once. Although we cannot always defend the practice, as it is cruel and very painful, still at times it is absolutely necessary. Firing or the application of the actual cautery is beneficial, and often removes pain very rapidly when blisters fail, and in all cases of chronic or severe lameness is to be recommended. Obtain the services of a veterinary surgeon, and have the firing done in lines superficially, being the least calculated to blemish. DR. MOLE.]

## Miscellaneous.

## FARMERS' SOCIETY LIBRARY.

SUBSCRIBER, New Brunswick:—"Our Farmers and Dairymen's Society desires to start a small library of books covering all branches of agriculture, and has some \$20 to devote to that purpose. We would be glad if you would recommend us a list and put us in the way of securing same."

[We have a very large library in our office on all branches of agriculture, and we secure the best books published from time to time by publishers in Canada, United States, and Great Britain, but we have no one complete catalogue that would be satisfactory to you. We have gone carefully over our works and have made up a select list, which would make you a very complete little library to start with. They are as follows, with author's name and publisher's selling price:

Agriculture (James)	\$0 25
Feeds and Feeding (Henry)	2 00
Principles of Agriculture (Bailey)	1 25
Fertility of the Land (Roberts)	1 25
Silos and Ensilage (Woll)	75
Farmyard Manure (Aikman)	45
Vegetable Gardening (Green)	1 25
Horticulturist's Rule Book (Bailey)	75
The Honeybee (Langstroth)	1 25
Spraying of Plants (Lodeman)	1 00
Principles of Fruit Growing (Bailey)	1 25
Artificial Incubation (by various poultry specialists)	50
Dairying for Profit (Mrs. E. M. Jones)	25
Milk and Its Products (Wing)	1 00
Principles of Modern Dairy Practice (Grottenfeldt and Woll)	1 50
Farm Live Stock of Great Britain (Wallace)	3 25
Domestic Sheep (Stewart)	1 50
Heavy Horses—Breeds, and Management (British authorities)	1 25
Light Horses—Breeds, and Management (British authorities)	1 25
Pigs—Breeds, and Management (British authorities)	1 25

We have made favorable arrangements with the publishers and can supply the above works. Particulars as to terms on large orders may be obtained by writing this office.]

## RECLAIMING SWAMP LAND—SETTING AN ORCHARD.

SUBSCRIBER, Lanark Co., Ont.:—"There is on our farm a swamp containing about twelve acres, the bottom of which is a very stiff blue clay which when dry becomes very hard. This swamp is partly drained, there being a four-inch tile drain running through the middle, the wettest part. The depth of muck varies from one to three feet, and is considered wet land, although it becomes very dry and loose when exposed to the hot sun. It has been pastured for years, and although never having been seeded to grass, a sort of red-top grows. We intend plowing it, and ask your advice: (1) As to the best method of tillage? (2) What will be gained by plowing to the clay where it can be done? (3) Is there any kind of grain that will grow successfully on it, and if so, what kind? (4) Would it be better to seed it to permanent hay, and what grasses and clovers can be grown most successfully on it? (5) What is the value of swamp soil when dried and used in a cow byre as an absorbent?"

"I intend to set out a young orchard of about seventy or eighty trees on high, dry, well-enriched sandy land. (6) What distance apart should the trees be planted. (7) Should the orchard be cultivated for first two or three years and then sown to grass; if so, what is the best orchard grass? (8) Would it be advisable when planting to first put in on roots a little well-rotted manure or well-enriched soil? (9) What will keep mice from gnawing the bark round the bottom of trees in the winter time?"

(1) We would consider it well to plow the sod not more than four or five inches deep, roll it down, and leave till the grass is dead and rotted. Now cultivate well with a disk or other cultivator, and plow again, two inches deeper than before; harrow well and leave, if it shows no live vegetation, till fall, when the land should be ridged up so as to leave as much as possible of the surface exposed to the influence of frost.

(2) From one to two inches of clay plowed up and mixed with the muck will help it by adding a greater proportion of mineral matter, thus decreasing the tendency to rank growth and improve its physical properties. A dressing of 30 to 40 bushels of lime or 500 pounds of ashes to the acre would render the muck firm and serve to neutralize much of the humic acid which is sure to exist in it.

(3) We have frequently seen black muck sown to grain, but have never seen a good crop result. Some other crop, such as potatoes or fodder corn, would be more likely to yield a fair return.

(4) Seeding to grass would probably be the best plan to follow. Six pounds of timothy and eight of