

## Tobacco Culture.

WE quote the following, from an essay issued as a circular, by the proprietors of a Tobacco warehouse in Kentucky, in reply to some enquiries from a correspondent, about the management of this crop.

**THE SEED.**—Among the various names, we give the preference to the Blue Prior. It does not produce as long, leafy staple as many other varieties, but, all things being equal, it yields a finer fibre and richer texture than most varieties, and is alike adapted to manufacturing and shipping.

**THE PLANT BED.**—In open weather in January, February or March, select a rich spot of virgin soil; clean the surface of all leaves, burn thoroughly, so as to destroy all wild seeds, then dig three or four inches deep, thoroughly pulverizing the soil, incorporating the ashes with the burnt earth; rake smooth, removing all litter, and sow at the rate of one table-spoonful of seed to one hundred square yards of surface. Mix the seed in dry leached ashes, say one quart of ashes to the spoonful of seed. It is best to sow the bed both ways—now rake again, then tramp with the feet and cover with green brush, without leaves. Remove the brush after the frost is out of the ground and the plants begin to cover the bed.

**THE PREPARATION OF THE SOIL.**—This crop requires the best soil that you have. "New ground" or virgin soil yields the finest manufacturing leaf; but old well-manured land will give a larger yield and a richer, heavier article, which will be sought by the exporters. The soil should be thoroughly cultivated before the crop is planted. The ground having been well ploughed and cross-ploughed and harrowed, you will lay it off three and a half feet each way, and raise a small hill in the check. You are now ready for

**PLANTING THE CROP.**—This you will do the first "season," after your plants are large enough—when the first leaves are three or four inches long, just as you plant cabbages, replanting, of course, until you get a stand. You will find many impediments in your way of getting a stand.

Field cultivation will bring into requisition the plough and hoe. The ground should be stirred at least once a week, and not a weed or sprig of grass be permitted to show itself. The last step in this process, or the "laying by of the crop," consists in drawing up the earth carefully around the plant with the hoe. At this stage your first planting will begin to "come into top," or has attained sufficient size to be topped.

Topping is simply arresting the growth of the plant by taking out the bud, and is best done when the terminal bud alone has to be removed; if it goes beyond this point much of the strength of the plant has been expended in the formation of leaves that are lost. "Prime" off the under leaves up to the first good leaf, which is usually a hand's breadth from the top of the hill, then top, leaving ten leaves at first topping and reduce as the season advances.

**SCORING AND WORMING.**—So soon as the growth of the plant is arrested by topping, it will throw out "succors" just above the foot stalk of the leaves and around the main stalk. These, with the horn worm, will demand your vigilant attention. Never let them get a start on you. Once a week will ordinarily suffice to keep them under. In the midst of this struggle with these two formidable enemies you will find the first planting thicken and changing its colour; losing some of its clear deep green. The leaf, if folded between the thumb and finger, will break readily. These are some of the evidences that it is ripe and ready for the knife.

The cutting process is very simple. Split the main stalk down to within two inches of the bottom leaf, then with one down stroke cut the plant off just below the bottom leaf, and in raising place it on the ground, resting on the top leaves; so soon as it "falls," or wilts sufficiently, gather up and lay eight or ten plants together with the hands to the sun. The best cultivators do not scaffold in the field, but "hang" on sticks, one end in the ground, and remove directly to the barn.

The curing of the crop is one of the most important steps, in its whole treatment, and most difficult to describe in the space of a circular. If house room is plenty it may be cured with but little firing, indeed without firing, but if house room is an object, heavy firing is necessary; it is always necessary when a dark rich colour is desired. Do not begin with large fires. Keep constant, gentle fires until you attain the desired colour, then press your fires day and night until the entire leaf is thoroughly cured. It now hangs until you are ready for the next step, and until it comes in "case" for

**STRIPPING.**—Whenever the leaf is soft enough not to break or crumble in handling, "strike down" and bulk; removing the plants from the sticks, you lay it

in bulk, the tails slightly lapping over to preserve the "order." Now, put your best judge of the article to sorting; he will take off all ground leaves, lugs or cullings, and the strippers will separate the different grades, putting the bright in one lot, separating the long from the short of the same class, the dark heavy shipping leaf to itself, the fine dark manufacturing to itself, &c. Tie in hands of from five to seven leaves, wrap smoothly with a slip or short leaf, make the tie not over one inch and a half long. Hang on sticks and "hoist" in barn. When it has thoroughly dried and again comes in case or "prizing order," that is when the leaf is soft and the main stem is sufficiently dry to break readily for one-third its length, from the larger end, bulk down as follows: Raise a platform on your barn floor, cover with boards, over them a layer of dry straw, and lay one or two hands at a time, heads out, a course the length desired for the bulk; then a similar course, so as to have the tails about meet; then a third course with heads about midway the first, and the fourth with heads midway the second, and repeat this process until the work is completed. Cover with boards and straw, and put the weights on practicable. You are now ready for

**PRIZING.**—Procure a good strong cask of all well-seasoned timber; the drawn staves are the best; avoid poplar and all soft, brittle wood for staves. The prizing process is an important one, and we recommend the following mode. Get a piece of board cut to fit the inside of the cask, say six or eight inches at the broadest point, lay this in the cask and pack the first course with the heads against the straight edge of your board, the tobacco of course laid at right angles with it. This course being completed, place the board on the opposite side and pack as before; next place the board at right angles with its first position and pack as before—then opposite this last position and repeat the process, and so continue until the work is completed. You will always find straight samples drawn from hogheads thus packed.

Never put into the hoghead more than one hand at a time, and let that be carefully straightened and pressed in the hands of the attendants of the packer before it reaches him.

If your tobacco is ripe, rich, and of fine fibre, from 1,200 to 1,500 pounds is enough to put in a hoghead. If very fine or bright, 1,000 pounds is heavy enough. In "turning out" your hogheads, leave space enough to secure well the top head; see that it is well fitted and securely "lined;" then nail all the hoops, and mark your name plainly on both heads and across the staves, putting on it your private number.

Note in your memorandum book the quality and order of each hoghead, and furnish your commission merchant with a copy of it.

## Valuable Testimony in Favor of Drainage.

To the Editor of THE CANADA FARMER:

SIR,—Although the notice which has lately been attracted to the subject of underdraining in this country has not been entirely unproductive of practical result, yet the extent to which the system has been adopted has, up to the present time, been so trifling in comparison with what might have been expected from the important benefits to be derived from it, that there has been little encouragement to any effort to keep the matter before the public. Success, as a general thing, is the test of merit, and as in spite of thorough draining and other high cultivation I have been unsuccessful in avoiding the attacks of the midge and army worm, which have been so destructive in all the old settled parts of the country for many years past, I have felt disinclined to pursue the subject until the passing of these scourges left me better results to communicate. Last year my wheat was a decided improvement, one field yielding 29½ bushels per acre, while the crop in the neighbourhood ranged from 4 to 8 bushels, rarely going beyond 10 or 12, and I have heard of few as high, but none higher than 20 bushels per acre. My barley, however, having been sown very early, though in the first period of its growth giving the brightest promise, was with, I believe, all barley sown at the same time, almost entirely destroyed by the midge, and only gave 13 bushels per acre. This year, in consequence of my experience of last year, I made up my mind not to sow before the 15th May.

I now come to the point which has determined me to bring this subject forward again, namely the remarkable effect the draining has had upon my lands during the whole of this very wet season. The most sceptical observer could not have further doubted on

witnessing the condition of my drained lands. At any time during the spring they might have been ploughed to the greatest advantage. During the last four days of last week, and the Monday of this, being from the 11th to the 16th May, I ploughed and harrowed in 20 acres of barley and seeded the land with clover. About half of the field is low clay land, and I think there are few lands, if any, of that description that could have been so treated during those days. What particularly arrested my attention, however, were the circumstances attending a drenching rain, which fell between 11 o'clock and noon on Tuesday—a partial storm, which did not extend more than three miles south of the town line of York and Vaughan, and thence in a westerly direction. It was the most violent down-pour of rain I ever witnessed, surface drains, ditches and culverts which have previously been ample to receive and discharge the water being overflowed and washed out. Several rods of plank were washed away from some of the roads, and although the rain only lasted less than forty minutes, the water in the Humber River was immediately raised more than twelve inches. The fields of my neighbours at once became as it were the beds of rivers wherever there was an opportunity for the water to gather, running off in bodies of from two to three square feet from areas of four or five acres. Yet for all this, not a drop of water gathered on the surface of my fields. Where they were thoroughly drained, none, of course, ran off; and what is yet more remarkable, the flow of water was not perceptibly increased from the outfalls, the land having been previously left so dry to the depth of the pipes that it was in a condition to receive and absorb all that fell as fast as it came.

I will not at present trespass further upon your space, but hope that my experience may encourage me to address you again at some future time on the subject.

HUMBERFORD.

West York, May 18, 1864.

## Horse Pitch Fork.

To the Editor of THE CANADA FARMER:

SIR,—As hay-making will be upon farmers in a few weeks, and Mr. A. B. C., of Howard, wishes to know, through THE CANADA FARMER, about a horse pitch fork, I will give you a description of one which I have used for some years, and which I find to be a great saving of labour and time. Two men and a boy can, with the team with which they haul the hay in, unload a ton in fifteen minutes, raising it 25 feet high. It lifts about 200 lbs at a time, and costs about \$10. I have two blocks made of 1½ inch plank, 12 inches wide and 18 long, a cross-piece at each end, the thickness of the wheel, and bolted together. The wheel is cast iron, 10 inches wide and 1½ thick, and hollow on the outside. I hang the one block to the point of a pair of rafters, a little back on the mow, so as to swing the hay in over the beam, the other I pin to the post at the corner of the door as low as possible. The chain is about 60 feet long, of ½ iron, with a small hook on one end so as to pass through the blocks and hitch to the whippetrees. The other end is made forked for 2½ feet, with a bolt on each end 5 inches long, for putting through the head of the fork, which is made of oak, 4 inches square and 3 feet long. It has 4 prongs 22 inches long and bent to about the shape of a teeth hook, and 10 inches apart, they stand straight out when the handle stands up; it is 3 feet long. The chain comes down the back of the handle with the bolts put in from the same side as the prongs so as to balance the fork; a 3 inch ring is put through a link of the chain near the top of the handle, and another about 6 inches higher for a rope to go through and tie to the outer end of the ring below it.

The man on the waggon presses the fork into the hay with his foot, and slips the ring into the end of the handle, and gives the word to start. When the hay is high enough he pulls the rope which lifts the ring off the handle and lets the fork tip forward, and the hay falls. I use this fork for filling my stable loft, by opening the gable about 8 feet wide and hanging the one block to the point of the second pair of rafters, and the other to a stake fastened in the ground on the outside of the waggon.

A. H.  
Rossville, May 27, 1864.