

Always start to put in your cedar at the upper end of the drain and work down towards the outlet; never have an open drain running into an underdrain, and never, if it can be avoided, dig an underdrain to run into a drain already covered and filled in, as it will very likely result in getting the part already covered blocked. The best time of the year to fill in the underdrains is late in the fall, as by that time there will usually be a little trickle of water in the ditch which will give a grade and show if the fall is even. It will probably be found necessary to clean the ditch out as you go along, starting at the top end. The grade of the ditch should have an even fall on the bottom; never have any sags in it, except in the case of drinking places.

Underdrains will not draw well over 40 rods in length unless they are open at both ends, and it is not always easy or desirable to have them open at the top end; so to get over the difficulty it is a good plan to have drinking places along the ditch, say every ten or fifteen chains, beginning five chains from the top. The ditch at this point should be deepened about six or eight inches, so as to have the basin always full of water. Put the rails at this point about twelve to fifteen inches apart and make them heavier than the ordinary rails, and cover the drains with heavy two-inch cedar laid crossways, and spiked to the rails (see Fig. 5), leaving about two feet six inches of an opening in the length of the drain.

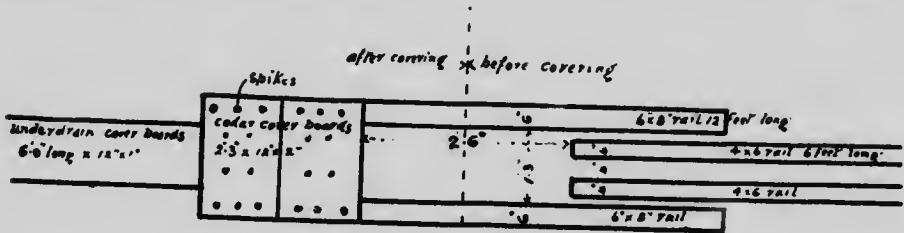


Fig 5 DRINKING PLACE IN DRAIN.

This makes a good drinking place for cattle and helps the drain to draw, and if carefully made it will last a long time and will not fill in. If the field is to be used for hay or grain it will be necessary to set a stout post about six feet high alongside it (the drinking place), so as not to run the horses into the hole when harvesting. It is also as well to get a load of fine gravel and spread it on both sides of the hole. This prevents the cattle from tramping it up.

Stumping.

The last stage of the clearing operations has now been reached, the stumping. The taking out of the last of the smaller second-growth firs, cedars, etc., should be done about four years after they are cut; the longer they are left the easier they will come out, but the big firs and cedars can be safely left until the farm is in a good, profitable state; in other words, this last stage of the stumping should be done out of profits and not out of capital, unless a man has ample means, as the big stumps, unless very thick, do not interfere to any extent with the profitable working of the farm.