for holding back an invading army of this pest, or the Army-worm. In wet seasons, however, such a trench would be practical. The plough with which the furrow for such a trench is made must be provided with a coulter. The earth is thrown toward the advancing larvæ, so that the furrow is vertical on the side which is to be protected (fig. 12). Such a furrow must be trimmed with a spade upon its vertical side, so that this may be sufficiently smooth to prevent the larvæ from climbing up it.

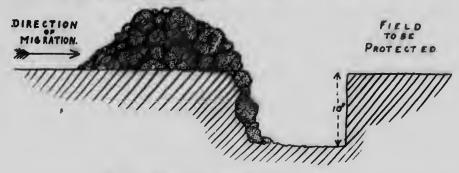


Fig. 12.—Diagram of vertical-sided furrow. (Original.)

Such a furrow cannot be made successfully when the soil is loose and dry, and in any case the subsequent trimming up with a spade calls for more labour than is usually available, on account of the length of the trenches farmers may have to construct. Under such conditions a dusty-sided furrow will be found to be more effective, and is considerably cheaper in construction (fig. 13.)



Fig. 13.—Diagram of dusty-sided furrow. (Original.)

This is made as follows: Turn as deep a furrow as possible with a walking plough, throwing the earth towards the field to be protected. This furrow should be sufficiently deep so that the distance from the crest of the ridge to the bottom of the furrow is at least a foot. If this is not obtained with ploughing once, the plough should be run through the furrow again in the same direction as before.

Now drag a heavy log down the furrow. The man who is in charge of the horses should stand on the back end of the log to weight it down. This operation will crush all of the large clods, and leave a smooth, dusty, sloping side to the furrow (fig. 14).

Usually the soil is sufficiently moist to crumble most easily directly after the furrow has been ploughed, while if the log is not drawn down it till the clods have thoroughly dried out, it will be difficult to crush them sufficiently with one operation.