The Figure 8 System of Ploughing.

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THE figure 8 system of ploughing applies to tractors only. Where mechanical traction power is used on the farm, direct expenditure on fuel and oil must always be taken into account. The importance of the time factor is also increasing, and farmers using tractors realize that *time* and *expenditure* are the two predominant factors in the cost of production.

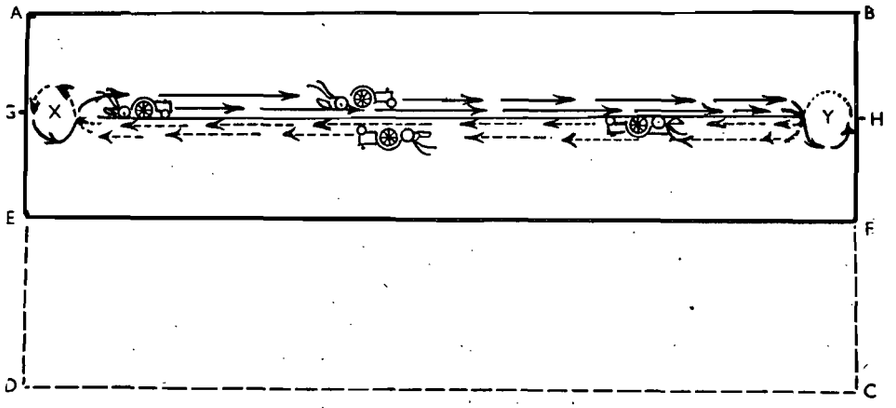

Fig. 1.—Start at X and plough clockwise. For the first five furrows, the plough is lifted only at X and at Y.

The aim of this system of ploughing is to avoid excessive changing of the gears of tractor and plough. Gear changing when turning is bound to cause wear, and when this operation is reduced to a minimum, the repairs bill will be kept down.

Furthermore, the plough is not lifted when turning, hence fuel is consumed for ploughing only.

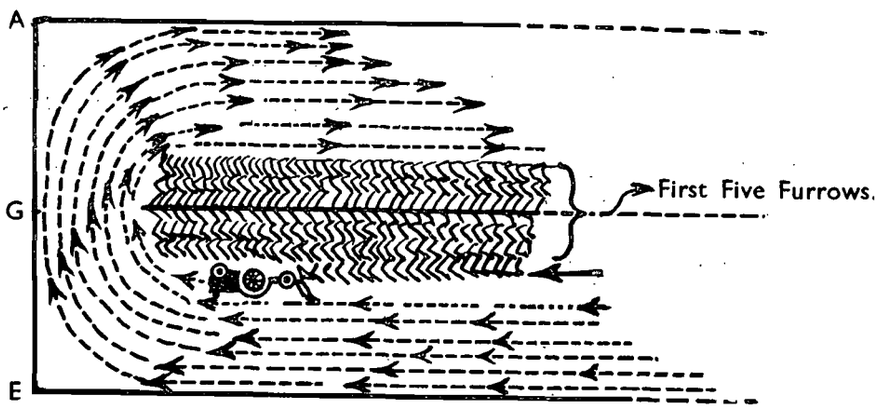

Fig. 2.—After the first five furrows the plough is not lifted again—narrow head-land.

An Example.

The procedure is as follows:—

If a land, ABCD, 300 yards wide and 400 yards long, has to be ploughed, divide the width into three equal parts of 100 yards each. The first plot of land, ABFE, will therefore measure 400 by 100 yards. Mark two points, G and H, halfway between AE and BF respectively and two points, X and Y, on the bisector GH, 25 yards from G and H respectively (see accompanying sketch).

Now start ploughing with the tractor and plough at point X and proceed from there straight to point Y. Lift the plough and turn as indicated by the arrows. By taking the turn in this way, a figure 8 is described by the tractor, and the plough re-enters at the left of the furrow, i.e. on the EF side of this plot of land. Now start ploughing at Y, i.e. plough the plot clockwise. At X the plough is lifted again, the figure 8 is described and the right wheels of the plough run in the first furrow. This is repeated five or more times until the tractor can make the turn with ease, after which the ends of the unploughed plot are ploughed without lifting the plough again or describing the figure 8. Continue thus without lifting the plough. The secret is to make the turns somewhat wide at the start and to plough the ends of the plot later, so that subsequently the ploughing is done almost in the form of a rectangle, resulting in very narrow head-lands. After some experience the process may be perfected until the ploughing of a head-land will be practically unnecessary. The figure 8 is described at the start in order to prevent capsizing the tractor and taking unnecessarily short turns under load.

It should be remembered that, theoretically speaking, the points X and Y should be situated fifty yards from the ends of the plot since half the width of the plot comes to 50 yards, but in practice this is not suitable and one fourth of the width of the plot must be taken. In the case of a beginner, one fifth of the distance, i.e. 20 yards, should be taken until the driver becomes accustomed to taking the turns. In this system of ploughing the plots should not be less than one hundred yards wide. The farmer may, however, increase the size of the plots once he has familiarized himself with this method of ploughing.

The following are the advantages to be derived from this system of ploughing:—

(1) Less fuel is consumed per unit area ploughed.

(2) Less time is required for ploughing the lands than is the case with the ordinary system of plot ploughing.

(3) The gears of the tractor as well as those of the plough are less subject to wear and tear—which means a saving in costs of repair.

(4) The furrows run in circles, i.e. in the form of contours, so that a land ploughed in this way, is better able to retain moisture.

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