

this is known, and also the grade, the main is begun at this point and constructed either up stream or down, as the case may be, and when the main is dug, the depth of each lateral at the junction is known, and the laterals may be dug, beginning at the main. Let me say again, *the place to begin operations, according to one of our maps, is the point on the main where the depth is given.*

(9) If the owner wishes to know the length of any particular drain, he can find it by measuring the line on the map, for 1 inch on his paper equals 100 feet in the field.

These maps have proven of great practical value. In numerous instances the owners have gone ahead and completed the whole system in one job, while in many others a field or two is drained each year. More-



Fig. 14. A typical drainage demonstration.

over, they are retained as a record, giving all the facts about the system, so that any drain may be located if desired. When the farm is sold or handed down to the son, the map is especially valuable, as it shows the new occupant what drains there are and just where each may be found.

For these same reasons those who put in systems of drains of their own planning might do well to make a map for future reference.

#### DRAINAGE DEMONSTRATIONS.

At the conclusion of the survey, after the map has been worked out in the rough, a public meeting is held in the field where the survey has been made, and the methods of finding the fall, determining the grade,