

PREPARATION AND CARE OF AN IRRIGATED FARM.

The first problem, that of knowing how to properly prepare a farm, and how to care for, and operate it after it is prepared, is thought by most new irrigators to be the sole and only problem that will confront them. The past experience, however, of thousands of our irrigators has proven that the problem is not yet half solved when the farm is all in crop.

Other serious problems are bound to confront them either singly or collectively.

SELECTION OF A FARM.

Great care should be used at the outset in selecting an irrigated farm. Many types of soil and topography lend themselves quite readily to irrigation, but the best, however, and the one which works most easily, is a soil of a medium sandy loam nature of at least four feet in depth before a porous gravel, or an impervious stratum, is encountered. A medium sandy loam soil will absorb water readily, cultivate easily and will not dry out quickly after irrigation, while the heavy clay loam soils do not cultivate easily, and do not absorb water readily enough. The porous, gravelly soils on the other hand absorb water too easily, require irrigation oftener, and a larger amount per irrigation than the heavier soils, due to the losses of irrigation water which take place through deep percolation. The growing of green manure crops, or the application of barnyard manure to either the heavy soils on the one hand, or the coarse porous soils on the other hand, materially improve their mechanical condition so that they will not only produce larger crops, but they will produce them with less work and less water. The humus from the manure or from the crops that have been turned under render the porous soils more impervious, and the impervious soils more porous, thus better adapting them for irrigation farming.

The topography of an irrigation farm plays a most important part in the ultimate success of the operator. It is a common fault with many settlers from the eastern humid regions to pick out a farm that is too flat, having too small a slope to render irrigation easy. The other extreme of too great a slope is also