

## MAKING A RESERVOIR FOR WINDMILL IRRIGATION.



WIND-PUMP irrigation will be depended upon more and more wherever the rainfall is apt to be deficient. The accompanying illustration taken from a photograph, represents a section of one of the many reservoirs in Meade County in south-west Kansas which have been used satisfactorily for some time. The pump is larger than the average in this locality, having a 12-inch cylinder, a 12-inch discharge pipe and a 10-inch stroke; it lifts the water 14 feet at the rate of 175 gallons per minute.

The preparation of the reservoir is most important, and in order to assist any who contemplate such an addition to their farm improvements, I will tell how I made mine. Select a site higher than the ground to be watered. Lay out the reservoir corresponding in capacity to the power of the pump. The pump must be capable of filling it in two or three days. Remove all sod, placing it beyond the limits of the walls. Do not use it in forming the embankment. Then plow and scrape, dumping where the wall of the reservoir is wanted. Continue until the work is completed, driving over the wall. Leave the inside sloping so the waves will not injure it. When the excavation is of the desired size plow the bottom and pulverize thoroughly. Hitch a team to a block, road scraper or other suitable object, turn in the water and begin to puddle by driving along one edge and continuing until the whole surface is puddled. This will cause a precipitation of sediment which will fill the pores of the soil and enable it to hold water quite well. The bottom will then be 12 to 18 inches lower than the surface of the ground outside, but that much water must always be left in the reservoir to preserve the puddling, for if it gets dry or freezes the work must be done over again. If the reservoir is small, say 30x50 x3 feet, some dirt for the wall must be obtained from the outside. An outlet can be made of four 2-inch planks long enough to reach through the wall. Saw the inner end sloping and provide it with a valve made of 2-inch board, and on the same principle as the valve in an ordinary pump.—American Agriculturist.

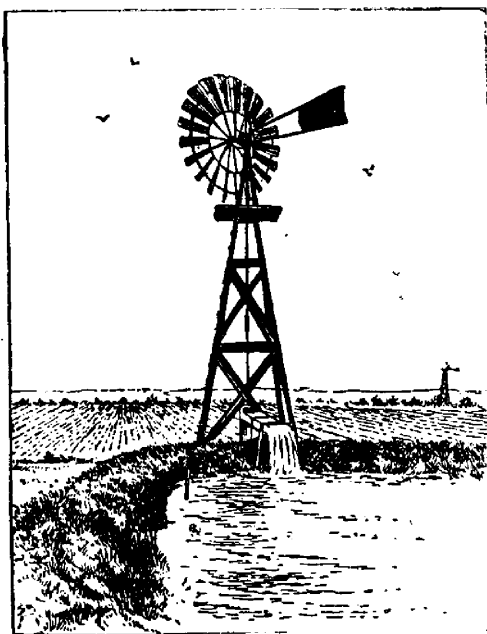


FIG. 799.—IRRIGATION BY WIND POWER.