

THE FARM HOME WATER SYSTEM

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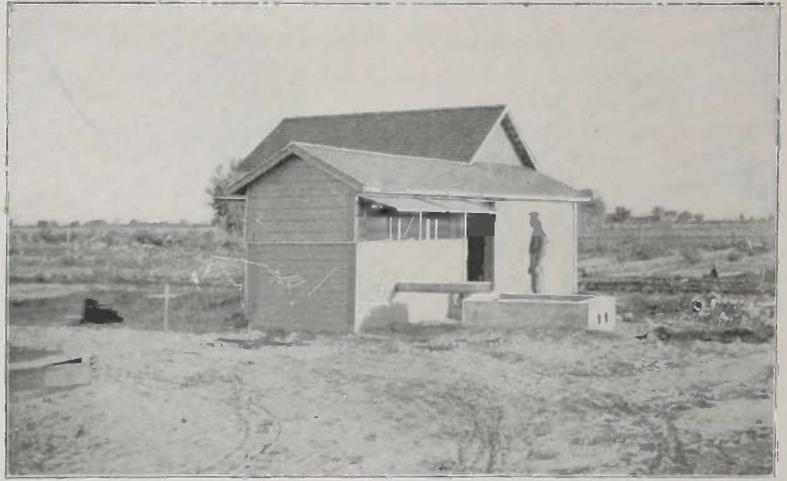
Types Of Water Supply Systems Suitable For a Farm; Points To Consider In Selecting a Suitable System

A GOOD water system, probably more than any other convenience makes the farm home comparable to the city home. Any farm or ranch home, no matter where it is located, if there is water within several miles or two hundred feet or more down, can have a water system of some kind. Water is invaluable in the farm home as a labor saver, as a health insurance, and for fire protection. An ample supply of water for the house, the stock, the garden, and the lawn, marks the successful farmer.

There are four major types of water supply systems which can be used for the farm home and other farm uses: The wind power plant, the electric or gasoline engine power plant, the hydraulic ram, and the natural gravity flow. All can be used in connection with a pressure tank, overhead tank, or some other kind of reservoir.

Windmills are the most used as a source of power in pumping water where there is sufficient wind to run them the year around. The windmill depends upon the velocity of the wind for its power, and if there is no wind there is no power. The strongest argument that can be used against the windmill is that it is of no use in calm weather; however, this objection or weakness can be largely overcome by using a storage tank or reservoir sufficiently large to hold three or four days' supply of water, therefore it is quite practicable to have a good supply of water on hand at all times if a reasonable amount of storage is provided for. The size of windmill to buy will depend on the amount of wind and the distance in which the water has to be lifted.

Pumping water with a gasoline engine or with electricity as a source of power is probably the least economical way of pumping water but each have the advantage over the windmill in that power can be had for pumping water whenever it is needed. The use of electricity for pumping is increasing rapidly wherever there is a source of electric power. The method is clean, quiet, and convenient, and stopping or start-



An Ideal Pumping Plant

ing a distant pump by throwing a switch may be a reality wherever transmission lines are so near as to make this power available. Electric motors may be had in any size to suit all sizes of pumps, and they may be arranged to start and stop automatically with changes in the tank pressure. Gasoline engine and electric power plants have another advantage in that a steady amount of power is delivered to the pump at all times while they are in use. This makes it possible in many instances where water is near the surface, to use pumps of high pumping capacity. Shallow well pumps have a suction lift up to 22 feet and can be used with better results and at less expense than deep well pumps.

The hydraulic ram is a very convenient and economical pump wherever there are streams and springs which flow enough water for its operation, and in which the water is free from contamination and suitable for use in the home. The hydraulic ram is an automatic pump operated by force of falling water. It is self-acting and utilizes the momentum of falling water to force a small amount of the water to an elevation higher than the source. A hydraulic ram has no moving parts except a lever and a valve, and it will last longer than any other pump.

The gravity flow water system is the cheapest and most efficient that can be installed where there is a pure and plentiful supply of water

which can be piped to a storage tank that is high enough to provide a sufficient pressure for all purposes.

In planning for any water system, a person should be sure that the source of supply is free from contamination and plentiful in supply. The system to install depends on the factors that will make one system superior to another for a certain locality. The initial cost, upkeep, depreciation, and simplicity of operation are all to be considered. These factors, each individual farmer must work out for himself. The storage tank should be large enough to supply sufficient water for a period of several days and be high enough to afford efficient pressure. This is especially important as an item of protection against fire.

An efficient farm home water system can be available for almost every farm home. The initial cost is low compared to the benefits derived from it year to year in better health and labor saving. Indeed, an efficient water system means money well invested and not simply spent.

\$50 Ram Pays for Self in Year

A \$50 ram of high standard, bred to a flock of 50 ewes, will pay for himself the first year. He will make possible added weight for age in market lambs; bring increased market price per pound; and make an improvement in the ewe lambs that should be selected to replace the old or unprofitable ewes in the flock.