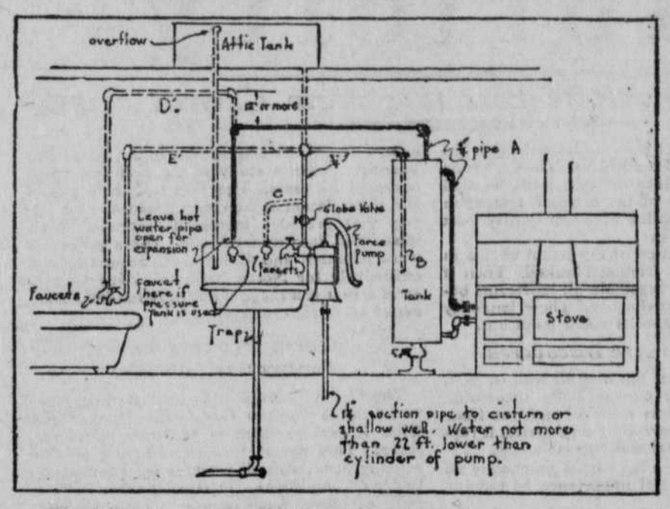
OF INTEREST TO FARMERS

INEXPENSIVE FARM WATER SYSTEM



By following simple directions this low-cost low-pressure water system can be installed in any farm home.

A low-cost water system, designed by A. W. Clyde, agricultural engineer at Iowa State college, makes it possible for the average farm family to have ready water for heating, shaving, bathing or washing without a hurried trip out into the cold after well water. Now, while farm activities are less numerous, the average farmer who is handy with tools can construct this system himself. The low cost of the simple system makes it desirable in old houses where it would not be advisable to install a complete commercial system. Clyde explains that it may be installed in the kitchen at a cost of from $40 to $50. This price includes force pump, range boiler, water front and the usual piping. The sink and drain are extra. Assuming that the sink and drain is installed, the first step is to install the force pump of the cistern type. An open spout pump will not answer the purpose since it cannot be added onto. The force pump should draw water through a one and one-fourth inch suction pipe from a shallow well or cistern in which the water is not more than 22 feet below the level of the pump cylinder. A faucet is attached to the pump. From the spout by means of a tee point, as shown in the accompanying diagram, a three-fourths inch pipe goes up and over to the range boiler. A globe valve is installed on the pipe just above the pump. An ordinary water front (or water back) is installed in the range firebox and connected with the boiler. The pipe, B, from the faucet extends down into the boiler but not below the level of the water front.

The pipe represented in solid black, labeled A, is the hot water pipe and extends from the top of the tank to the sink. If only the kitchen system without the attic tank is used, this pipe is left open to provide for expansion. With the faucet closed and the globe valve open water is pumped into the tank. When cold water is desired the globe valve is closed, the faucet opened and the pump is worked. When hot water is desired, the faucet is closed, the globe valve opened and the pump worked. This forces water into the lower part of the tank which in turn pushes hot water out of the top through the hot water pipe to the sink. The system is easily extended to the bathroom or any other part of the house. Note the pipe D represented by a dotted line which is an extension of the cold water pipe. This pipe has a faucet at the bathtub. Put a faucet on the hot water pipe at the sink. Then extend the hot water pipe to the bathtub, giving it a rise in level of 12 inches or more as shown in the diagram where the dotted lines, E, join the hot water pipe, A. This pipe is left open at the tub for expansion. By putting a tank in the attic the entire system can be made into a pressure system. The supply pipe to the tank is connected to the cold water pipe somewhere between the pump and the range boiler (shown directly above the pump in diagram.) An overflow pipe is provided as shown so that the overflow water may run into the sink. Faucets are used on both pipes at the bathtub and sink, the tank and overflow pipe taking care of any expansion. If the pressure system is used the short pipe, designated as C in the diagram, and a faucet are installed so that cold water may be drawn direct from the tank. The globe valve is then kept closed except when water is being pumped into the attic tank. The faucet on the pump may then be removed or left on as desired. The suction pipe from the well should be insulated where it passes through an unwarmed cellar. A drip pan may be installed under the tank to take care of "sweating." If there is danger of the tank freezing, one-half inch of insulation may be used around it. If necessary the tank may be disconnected in the winter and the pump pressed into service again. Since this is a low pressure system the pipes should not be larger than designated.

AGE VS. PRODUCTION

It is generally considered that a high producing dairy cow will wear out more quickly than a low producing cow. Generally speaking, this is undoubtedly true. However, it does not hold in all cases. One Holstein cow, for example, produced 23,000 pounds of milk and 900 pounds of butterfat in her 16th year. Few cows reach that age and fewer still, of course, of high producing cows can keep up high production for such a long period of time. To a certain extent age is undoubtedly affected by methods of feeding. If a high producing cow is always fed a well balanced ration and is given enough to maintain her body in perfect condition, there is apparently no reason why a high producer should not live as many years as a low producer. Fourteen years ago there wasn't a single cow in any breed of cattle that had produced as much as 30,000 pounds of milk in a year. Today the Holstein breed alone has 100 cows that have produced that much milk or more in a year. Other breeds also have large numbers of cows that have produced the same amount of milk or at any rate as much butterfat as 30,000 pounds of Holstein milk would normally contain. While high milk production does not depend solely on the ration fed, as everyone knows, feed has a great deal to do with it. The ability to produce is a quality that is inherited, hence breeding must never be neglected in building up a high producing herd. But no matter how well bred a cow may be, if she is not given the amount and kind of feed that is required to produce a high milk and butterfat yield, it is impossible for her to do so. A cow can produce milk only out of the feed she consumes above that required for the maintenance of her body. The age a cow may attain is not necessarily cut short because she is being fed for high production, as is shown by the fact that the hundred cows, mentioned above, which have records of 30,000 pounds of milk a year, range in age from 3 to 11 years.

GIVE HENS PLENTY LIGHT

Careful tests extending over a 4-year period at one agricultural experiment station show that exposure to direct sunlight during the winter months is desirable, but not essential to egg production, provided the hens have access to reflected sunlight; also that exposure to direct sunlight at intervals of 10 days or even longer will enable healthy hens to keep up a good rate of production and will insure eggs that will produce strong, healthy chicks. If deprived too long of drect sunlight, hens are likely to suffer a complete breakdown, fall off sharply in egg production, and such eggs as are produced will contain embryos so weak that they will not hatch. Even a few hours in the sun or in reflected sunlight on mild days during the winter will prevent serious consequences. These results would seem to indicate that we may perhaps have been placing too much attention in our poultry and hog houses to the proper location of the windows so as to have the direct sunlight fall in the pens; and that perhaps better results would be secured by having more window surface; to have them covered in winter with glass or fabric that will admit the ultra-violet rays shut off by common glass, and then to keep the rafters, walls, partitions, and other interior parts well whitewashed or painted so as to reflect and spread the sunlight as efficiently as possible. For example, it has been definitely proved that the addition of a straw loft to a poultry house helps very materially in controlling the temperature and at the same time largely solves the moisture and ventilation problem, and already many experiments are under way for applying the straw loft to hog houses, apparently with very satisfactory results. The high monitor and half monitor poultry houses, facing the south and with the windows up high above the floor are the ones most in need of the straw loft method of temperature control; but putting in a good straw loft cuts off the direct sunlight from the floor. This value of reflected sunlight, however, may mean that the sunlight can be admitted lower down and spread by whitewashed walls and pens, and the straw loft thus made possible. At least, it is something for our poultry and swine experts to consider very seriously.

ROOSTS AND NESTS

When the spring hatched flock of pullets is put in the laying house for the winter we should keep in mind that 3 to 4 square feet of floor space for each hen, even though it is the usual recommendation, is a rather dense population. Because of this we should give considerable attention to the sanitary conditions of the floor. The best method of keeping the floor and litter reasonably clean is to put a solid board platform about 8 inches beneath the roosts. This part of the equipment is worth many times more than its cost in making it easy and convenient in removing the droppings, and in keeping the floor clean. Production is increasing in well managed flocks. One should make sure of enough nests to accommodate the number of hens, as also their rate of production.

SENSIBLE CO-OPERATION

Suppose you are in a section that hasn't been using fertilizer much. You want to put some on your land. You know where to get it; hauling is no problem; but how can you get it on the land? You can buy a fertilizer spreader, of course, but you'll only use it a few days in the year. It seems a waste. The same problem comes up with terracing machines, and a dozen other tools that may be badly needed, but that are used only for short periods. How can a farmer get the results he wants without tying up too much money in little used machinery? Group action is obviously the answer here. Sometimes two or three neighbors go together to buy a tool; sometimes a larger group, perhaps a threshing ring, buys the equipment. In one county, some business men bought machines and rented them to farmers at cost. The local co-operative could do the same; so could any other local farm organization. There is a good deal of modern machinery that is built to handle the work on a farm of 1,000 acres or more. Small farmers need it, but can't afford to own it. The more ready they are to plan for co-operative ownership of such tools, the less they will need to worry about the menace of the corporation farm.

Will Seek Place In Senate for Maine

Former Gov. Ralph C. Brewster of Maine, has announced that he will become a candidate for the Republican nomination for United States Senator at the June primaries. Brewster would succeed Senator Arthur R. Gould. Gould recently stated he would not seek re-election and would support Wallace D. White for the nomination. (International Newsreel)

Claims Discovery of Principles of Proton

Colonel Frederick E. Johnston, U. S. A., retired, of the Army and Navy Club, after 31 years of continuous research, claims the discovery and development of the structural principles of the electron, proton and atom, the smallest units of matter, as the fruit of his labor. (International Newsreel)

Nominated Chief of Army Chaplain

Lieut.-Colonel Julian E. Yates, whose nomination as chief of chaplains of the U. S. Army with the rank of colonel, was sent to President Hoover. If he is named he will succeed Col. Edmund P. Easterbrook, who retires Dec. 22. Col. Yates was born in 1871. His army service began in 1902 when he was appointed a chaplain with the rank of captain. He saw service in the Philippine Islands for two years after entering the army. (International Newsreel)

The Other Woman In Chicago Triangle

Mrs. Dorothy Schwinefurth-Langley, of Chicago, "the other woman" in the fatal shooting of Morris Leeney, 39, by his wife, Mrs. Florence Leeney. Mrs. Leeney shot and killed her husband as an answer to his demand of "what she was going to do about his running around with Mrs. Langley," who incidentally is a cousin to Mrs. Leeney. (International Newsreel)

Santa Claus in Cupid Role

Maxine Glass, 21-year-old University of California co-ed, displays a diamond ring on her engagement finger, which, she says, was given her by Richard Dix, film player. She told friends the ring was on her Christmas tree. (International Newsreel)

She Kills Husband in Christmas Quarrel

During a Christmas night quarrel, Mrs. Margaret Schlicht (above), of Madison, Wisconsin, shot and killed her husband, Robert Schlicht. She is being held by the authorities awaiting trial. (International Newsreel)

Heads $60,000,000 New Electrical Firm

John J. Gibson, vice-president and executive head of the new Westinghouse Electric Supply Company, which will begin operations January 1st with units in sixty cities. Through its branches extending from Bangor, Maine, to San Francisco, the company expects to do a total business of $60,000,000 in wholesale electrical supplies. (International Newsreel)

Nature's Secrets May Aid Farmer

Mrs. Ethel Ely Pattison, of New York, one of the few expert woman seed analysis in the world, at work in her laboratory, weighing some imported soy beans, preparatory to making a complete analysis of their suitability to native culture. Surveys are also made for the guidance of purchasers of huge quantities of seed from abroad. (International Newsreel)

Millionaire Weds Sports Woman

Conkey P. Whitehead, millionaire New York and Atlanta sportsman, familiarly known as "the Playboy of the Caribbean," in a snapshot taken on his yacht some time ago with Frances Porter, the showgirl with whom he had an extraordinary romance two years ago. He married Miss Marian Hughes, noted sportswoman and tennis enthusiast, in New York. (International Newsreel)

Hero of Prison Riots May Be New Warden

Captain Stephen A. McGrath, commanding officer of Troop D, New York State police and ranking captain of the State police, is considered a likely candidate for the post of warden of Auburn, to succeed Warden Edgar S. Jennings McGrath, who was regarded as a hero of both riots among the prisoners recently, is believed to fulfil Governor Roosevelt's demand for a strict disciplinarian to govern the institution.

Housemaid Wife $20,000,000 Heiress

Mrs. Frank Savin, of New York, who has inherited an estate of $20,000,000 from her husband, whose housemaid she was three years ago. Following service in the household of the retired Portchester broker, Mary Schleis became Mrs. Frank Savin, and, upon the death of her husband a few days ago, succeeded to an estate valued at $20,000,000. (International Newsreel)

Pair of Pretty "Tars"

Left to right, Misses Julia Norkus, 18, of South Boston, Mass., and Phyllis Conreau, 18, of Quincy, Mass., dressed in sailors' uniforms, in which they were held by police of Charlestown. Girls said they had attended a party with two sailors, who handed over their suits and dared the girls to walk about the streets in them. (International Newsreel)