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Issued  
Each Week

# FARM AND DAIRY & RURAL HOME

Only \$1.00  
a Year

Vol. XXVIII.

FOR WEEK ENDING MAY 6, 1909.

No. 18

FORMERLY THE CANADIAN DAIRYMAN AND FARMING WORLD

## THE FARM WATER SUPPLY AND ITS INSTALLATION

J. R. Philp, Grey County, Ont.

**A Pure Wholesome Supply of Water is an Absolute Necessity on all Farms. Some Comments on the Means Used to Secure and Distribute Water in Farm Buildings**

**T**HE water supply is of the greatest importance. It is probably the most neglected of all necessary improvements on a great many farms. Those of us who value the health of our families as well as that of our animals, dairy animals especially, and would have a supply of pure, wholesome milk, know that we must have pure water in abundance. It is an utter impossibility to get wholesome milk without pure water.



J. R. Philp, Grey Co., Ont.

It is just possible that we may use impure, germ-infested water for considerable time without any visible ill effects. But, just as soon as conditions are favorable, those germs will develop into it may be Typhoid, Dysentery, or some other malady. Typhoid Fever, undoubtedly, is most frequently contracted from drinking water or milk in which the germ of the disease exists.

### TYPHOID INFECTION.

Milk is one of the most common causes of infection. Why? Because we are not particular enough about the water that our dairy animals are allowed to drink. It is a criminal offence to allow cows to drink from stagnant pools reeking with filth and disease germs. The cow has no machinery in her internal organs to eliminate those disease producing germs that she is so often forced to swallow while endeavoring to quench her thirst. One would be quite safe in estimating that three-fourths of typhoid cases can be traced directly or indirectly to impure water. Let us therefore resolve to make an honest effort to get a supply of pure wholesome water. A few years ago when the epidemic of typhoid broke out in Fort William, it was traced to impure water, caused by a ship dragging anchor in the harbor and damaging the water main thus allowing impure water to be taken from near the shore. The writer knows of cases where the doctor has prohibited the use of water from certain wells.

### BE THOUGHTFUL OF THE WELL.

The cost of keeping the well in sanitary condition would not go far in paying a doctor bill, to say nothing of the distress and suffering of those affected, as well as the suspense of those in attendance. Besides the disease sometimes proves fatal. And yet how careless or thoughtless so many are about the condition of the well.

Naturally in most places in Ontario we are blessed with an abundance of pure wholesome water. But unfortunately a great many wells are so located as to cause the water to become contaminated by surface wash, or drainage from house, privy, barnyard, or other sources. In

some instances the covering has been neglected and has become open so as to permit mice, toads, rats and other kinds of vermin to get in. These soon putrefy the water.

### THE LOCATION OF WELLS.

The first essential is to procure pure water. Then keep it free from contamination. If the supply is received from a well great care should be exercised regarding its location. Have it a safe distance from outbuildings and where no surface wash can enter it. Where the well is near the dwelling care should be taken in emptying all wash water and refuse from the kitchen. The cribbing is very often defective. In most municipalities cement tile of different sizes are crib for a well. They make a permanent job as well as being close. If kept covered tight such a crib will exclude all vermin.

In a great many districts the drilled or driven well is taking the place of the excavated well. The contractor agrees to get a sufficient amount of water from \$1.25 to \$1.75 per foot of depth, giving you a four, five or six inch well, cased with iron. Such wells are generally deep enough to insure a supply of pure water, and there is little danger of them becoming contaminated.

service. The first cost is practically the only cost. The writer has one (a pumper) that has been in operation for over six years, and repairs have cost me only 10 cents.

Some are fortunate enough to get their water supply from a spring by gravitation. Then very little is required, except piping. The hydraulic ram gives splendid satisfaction where the supply is sufficient to meet its requirements, and a head can be obtained. Where the supply is obtained by gravitation or by a ram it is not necessary to install a very large reservoir. The constant flow, though it may seem small, will supply an ordinary farm.

### STORAGE TANKS.

When a power of any kind is used a tank is necessary. There are different styles, viz., wood, steel, brick, stone or cement. For locations, such as upstairs over a basement, the two former are most practicable. There are firms who make steel tanks to hang to joists under the upper floor. When the three latter are used they will be required to be built on the ground to get a solid foundation. The steel tanks, (galvanized), should get the preference, as they do not taint the water and are easily kept clean. Always use galvanized pipes. They are a little more expensive to buy but will last a third longer and will not rust or taint the water.

When erecting a pumping mill, place it directly over the well if possible. Then drive the water where it is required. Water is much easier driven than drawn. If the pumping is to be



"Hillview Farm," the Well Appointed Homestead of Mr. J. R. Philp, Grey Co., Ont. For many years Mr. Philp has carried on farming operations on his 150 acre farm in South Grey. The success that has attended his efforts is exemplified in his clean farm and in his neat substantial farm buildings. Read his article in the adjoining columns on "Farm Water Supply."

These wells require iron pumps as the wooden variety are too large. A good iron pump properly installed gives the best of satisfaction.

### POWER FOR PUMPING.

If we are going to have a perfect water system power of some kind will be required. Windmill gasoline engine, tread, or other form of power. The sketch on page four gives an idea of how a windmill may be installed in order to give good

done with a power mill that is on the barn or other building, two triangles with wire cables attached, or if close a jerk rod will give satisfaction. (See sketch.)

### LAY PIPES IN TILE.

It is money well spent to buy 2 1/2 inch tile to run the pipes through. This lessens the danger of frost, the pipes will last longer also, and if at any time they should need to be lifted, one can