

cannot be overestimated. It is more necessary to health, strength and physical development of man and beast than is food. As you already have discovered it increases the selling value of the farm. Therefore an investment in pure water is invariably profitable for the individual while it is a national service of high order—it conserves the health and strength of the nation's manpower and live stock.

Nor Need the Investment be heavy. Only a little care, labor and expense, usually, are required to ensure pure water. In the early fall when water is low is a most convenient time to do the work.

WHY WATER IS CONTAMINATED.

Source of Supply. The surface soil contains impurities, and these contaminate surface water. When filtered through ten feet of soil, however, the water is purified. Wells, therefore, in ordinary soil formation should be at least ten feet deep and should be protected to this depth to prevent the entrance of surface water.

Location of Well. Wells frequently have been dug in the barnyard, in the direct line of seepage from manure pile or privy, or in a low spot where surface water collects. Water from such wells is likely to be impure. If, to avoid these sources of contamination, the well is located at some distance from the buildings, the pump may be placed conveniently in the house or barn and connected with the well by an underground pipe. But the highest point in the pipe must be not more than 25 feet above the water level in the well.

Protection of the Well. The dug well very often permits the entrance of surface water, as do many drilled and driven wells. Every well should have water-tight curbing or casing for the first ten feet and a closefitting, water-shedding cover to prevent

THE IMPORTANCE OF PURE WATER the entrance of surface water, of insects, frogs, mice, etc., of filth from the feet of persons, animals and poultry.

QUESTIONS FOR EACH TO ASK.

Is my well located on ground lower than that surrounding it? After a heavy rain is the water discolored? If it is, surface water is entering the well without being properly filtered.

Do I occasionally pump the remains of insects, earthworms, frogs, mice, etc., from the well? If so, the cover or curbing is not tight and the water

Is the well located in direct line of seepage from privy or barnyard? Is the water ever offensive to taste or smell? If it is, grave danger lurks in the well-fevers often are deadly.

TO PURIFY DRINKING WATER.

Any who are at all suspicious that the water, either at home or at school, is impure are invited to write Professor D. H. Jones, Bacteriological Department, O. A. College, Guelph. Professor Jones will at once send a sterile bottle with directions for obtaining a sample. Upon receipt of the sample a test will be made free of charge, and the analysis will be promptly returned.

Meanwhile guard the health of the family by disinfecting the water used as follows: Dissolve a level teaspoonful of chloride of lime in a teacupful of water, dilute the quantity with three cupfuls

DO YOU KNOW OF A FARM FOR SALE?

If so let us know. It is expected that returned soldiers with some capital will wish to buy good farms in Old Ontario, conveniently located and at a reasonable

If you wish to sell your own farm, kindly forward a complete description of it—the location, distance from church, school, post office and nearest town, and the condition of the roads, nature and condition of soil, amount of drainage done and required, kind and condition of fences, number of acres and how cropped, noxious eeds prevalent, complete description of buildings and source and condition of well water. State sum for which you will sell.

Write at once the office of the Commissioner of Agriculture, Buildings, Toronto.

of water, then add a teaspoonful of the diluted solution to each two gallons of water and stir thoroughly. The water thus treated will be without taste or odor and will be safe for human con-

TO IMPROVE THE OLD WELL.

The next step is to remove the cause of pollution. If it is a dug well in a good location, tear out the old lining ten feet down and relay with cement, backed by at least a foot of puddled clay. Raise the top above the level of the ground and bank with puddled clay to shed water. Then make the cover absolutely tight with cement of a double layer of boards. In case the well is in direct line of seepage from barnyard or privy, however, the only safe method is to change either the location of the well or the source of pollution.

If the drilled or driven well is sunk in the bottom of a dug well, exactly the same precautions must be taken. In any case, it is safer to puddle the clay or to cement around the casing to the depth of ten feet to prevent surface water following the pipe and contaminating lower water. The cover in all cases should be made perfectly tight.

For practical, timely and detailed information concerning:

The location of underground water. Proper location of the well.

Proper protection of any particular well.

Relative value and uses of different kinds of pumps. Installation of water systems for house

or barn. Purifying water in or out of well.

How to have water tested for impurities.

Diseases that are caused by impure

Value of pure water in development of live stock.

Or information concerning any other point of practical interest regarding wells, pure water or water equipment, write the Office of the Commissioner of Agriculture, Parliament Buildings, Toronto, Ont.



ONTARIO

ONTARIO DEPARTMENT THE AGRICULTURE

PARLIAMENT BUILDINGS, TORONTO

SIR WM. H. HEARST Minister of Agriculture

DR. G. C. CREELMAN Commissioner of Agriculture