

as a rule), or near the back door, out of which the household slops may be thrown and near which the garbage heap with all sorts of refuse may be found. It is quite true that most soils, and more particularly those that are porous and well aerated (gravels and sands), possess filtering and purifying properties in a marked degree, but the soil surrounding wells located as we have described must in time become saturated with organic filth of a most objectionable character, and is then no longer able to purify but rather serves to more seriously contaminate the water passing through it to the well, which under such conditions may be said to act as a cess pit.

Further, we frequently find these wells become the watery grave for rats, mice, frogs and other small animals, the decomposing bodies of which render the water foul and unfit for use. Imperfect protection of the mouth of the well may allow the entrance of surface wash. Rotten crib work is another source of contamination. Other causes of pollution could be enumerated but enough has been said to justify the conclusion that the ordinary farm well is at the best a poor supply and should be abandoned for a safer, purer source. The examination in the laboratories of the Experimental Farms of hundred of samples of such well waters have shown that few of these wells furnish a supply that can be considered wholesome, by far the larger number must be condemned as totally unfit for use. Considering the location of most farm wells, it is not a matter of surprise that but a very small proportion of them yield water of sufficient purity to be classed as satisfactory. Many of these waters are colourless, bright, sparkling, clear and cool, but these qualities are no criterion and it is by no means uncommon to find waters possessing all these commendable properties and at the same time reeking with filth. Of course, if a well water becomes turbid after a rain, there is reason to reject it, for in this turbidity we have a sign that the soil is no longer able to do its work as a filter and purifier.

A precaution of very considerable value, towards protecting the well water from organic filth, is to line the well to a depth of say 10 or 12 feet to a thickness of say 6 inches with concrete or puddled clay. This lining should project some 6 to 12 inches above the mouth of the well. This prevents the direct inflow of wash and of water from the surface soil, in which the larger amount of putrescible organic matter is found and ensures a certain amount of filtration through clean layers of soil.

Another safeguard is to keep an area of say 50 yards radius round the well free from manure and all deposition of filth, (it should preferably be in sod), and this plan we would heartily recommend to those who are contemplating sinking a well for