

The Water Supply of Farm Homesteads.

Since the establishment of the Dominion Experimental Farms the question of the water supplies of farm homesteads, creameries and cheese factories, and, to a more limited degree, those of rural schools, has received the attention of the Division of Chemistry. Through the various means taken we are aware that an interest has been awakened in the rural water supply, and much good accomplished, but we also feel convinced that there is a necessity to continue the campaign for better water.

Impure Water a Menace to Health.

There ought to be little necessity nowadays to emphasize the vital importance of a pure water supply. The inhabitants of the larger towns and cities, thanks to the investigations of the chemist and bacteriologist and the publication of the statistics collected during the last three decades, are realizing the intimate relationship that exists between health and the quality or, more correctly speaking, the purity of the water supply. The fact that outbreaks of typhoid fever in our large centres have, in many instances, been indisputably traced back to a polluted water supply has served to win this general admission and facilitated the task, for the civic authorities of obtaining large sums of money to procure an ample supply of wholesome disease-germ-free water. In many rural districts, however, it has been found impossible, so far, to arouse the keen interest which the subject of pure water deserves. Farmers are very conservative and modern methods, especially when they entail considerable expenditure, or cause some inconvenience, may not readily be adopted by them. Farmers, as a class, are not yet fully alive to the value of unpolluted water for themselves and their families, for the health and thrift of their stock and the quality and wholesomeness of their dairy produce. Nor do they realize how easily and how frequently not only typhoid fever—the most serious of water-borne diseases—is contracted from the polluted well, but that diarrhoea and allied forms of intestinal derangement—common disorders in many a farmer's family—are the result of drinking water from contaminated sources.

The Natural Water Supply.

There is probably no better watered country in the world than Canada. We can unhesitatingly affirm that our natural waters of lakes, streams and springs are of the purest. Unless these are endangered by local sources of contamination they may be utilized to furnish the water for domestic purposes. Our deep-seated waters also are for the most part organically pure. It is to the deep drilled or bored well that the larger number of our farmers must look for their supply of good water. This class of well, located beyond the possibility of local contamination, is the solution of the problem for many. It is the well that experience has shown to yield the safest water.

The Shallow Well a Source of Danger.

The source of the supply on the larger number of farms is the shallow well, say from 5 to 30 feet deep, which merely collects "ground water," the soakage from the surrounding soil. Unless the location is of good reproach from the sanitary standpoint, this shallow well is a menace—its waters may at any time become a source of danger. When, as is only too frequently the case, we find these wells sunk in the barnyard, or under the barn or stable, or not far from the privy (a most crude and unsanitary affair, as a rule), or near the back door, out of which the household slops