

It may be well for us to consider for a few moments the sources from which our people draw their water supply. And here I refer more especially to rural districts, as it is to be supposed that every progressive town has a water supply which is free from risk of contamination.

1. Rivers. Water may be derived from this source for domestic purposes, and indeed has to be so derived in very densely populated centres.

The supply of water from such a source has no very great objections if the river has not passed through a cultivated and settled country and thus become liable to contamination.

Such water has usually a muddy, turbid appearance and may contain an excess of vegetable matter; but where it has not flowed through such a country as described it is not liable to contain very many pathogenic or disease producing organisms.

But unfortunately it often is contaminated, and therefore is to be regarded with great distrust as a water supply. It was owing to Hamburg deriving its supply from the river Elbe that led to such a wide distribution of a fatal epidemic of plague, a few years ago.

2. Artesian wells. These are usually of great depth, passing through impervious strata, and are the very best and purest of water supply.

3. Springs. Are of course good supplies.

4. Deep wells. These are wells not necessarily deep in number of feet, but deep in that they pass through an impervious stratum and tap the water underneath. The water in this case has usually travelled a long distance, and during its percolation has become filtered and purified. It is therefore an admirable supply of water for domestic services, provided proper precautions are taken to ensure that the subsoil water cannot filter through its walls and thus contaminate an originally pure water.

5. Shallow or surface wells. These wells are shallow in the sense that they do not penetrate through any impervious stratum, but merely drain the subsoil. They may actually be deeper in number of feet than a "deep" well and yet be called shallow.

These are the most dangerous of all sources of water supply, and unfortunately they are a very common source in rural districts.

How often do we find such a well at the farms in county districts! And it would not be so objectionable if they were some distance away from any cesspool, manure heap or other source of contamination.