

voir, with a porous stratum; (7) the collecting area must have sufficient elevation to act as a fountain-head; (8) there must be a continuity of the permeable bed; (9) there must be no flaw or breach in either of the confining beds. Prof. Chamberlain gives the necessary inclination of the strata as at least one foot per mile. It will at once be apparent that it is not every district in Canada that could expect to have artesian wells; but most of them may have drive wells, their capacity being strictly governed by several of the principles above enumerated. As regards cost of testing this is comparatively small. For instance, a drive well in Iowa is stated to be two hundred and five feet deep, and to have cost one dollar per foot for the first one hundred feet and two dollars for the second one hundred feet. It flowed one thousand seven hundred gallons per diem.

To show that the *drive* wells have at least similar capacity it may be stated that a system of one hundred pipes some fifteen feet apart connected with a common pumping station have proved equal in Brooklyn to supplying some five million gallons daily. Regarding the question of purity, all evidence points to the purity of such subterranean supplies since, by the very nature of the case, the filter bed is simply the extent of the area by the depth from which the supplies are drawn. We understand that experiments are being made in St. Thomas and in Brantford with a view to ascertaining the available capacity of a *drive* well system.

Chatham council has under consideration the question of deriving her water supply from Lake Erie or Lake St. Clair, the Thames, with London above and considerable vegetable matter along its course, being thought a somewhat questionable source.

Galt, owing to her situation on the declivity, the soil of which barely covers the fissured limestone rock below, has for years suffered greatly from the pollution of wells in lower parts of the town. This year a fatal form of diarrhoea prevailed, causing many deaths. Where to get her water supply, whether from the Grand, from Mill Creek or elsewhere is the question she now is considering.

Brockville has practically decided on having a public water-supply. After much discussion as to

whether an eddy in the river would cause the output of sewage to pollute the water she has decided to *take in water* and steam up.

Guelph water-supply from springs along the river Speed was this year the cause of much anxiety. When the springs got too low, river water was used without, it is said, filtration. We understand the remedy has been applied.

Owen Sound has splendid public water, but typhoid is very prevalent there. Perhaps every householder is not a taker of public water. Polluted soil and bad drainage demand the universal use of pure water, and a sewerage system to carry it away. Modern house drains are usually worse than none at all. MEDICAL SCIENCE would like to hear from Owen Sound.

Woodstock defeated the by-law for water-works. Perhaps the idea that the company *would stock* the town with a poor water at a high price defeated the measure. Try the springs on the hill-side!

Barrie similarly defeated a by-law, but particulars are not to hand. Would someone state whether it was because the sewage output was too near the intake pipe? Sarnia could tell all about that.

Warton voted \$8,000 for public water, to be supplied by the Holly system. This little town up on the Bruce peninsula, has shown all of its namesake's energy, without the spider-web episode. It has its eye on summer visitors!

Berlin, that formidable rival of her Trenton sister, Guelph, is to pump water from springs, situated along the declivity overlooking Shoemaker's pond, a never-failing reservoir. If as successful as those at Springbank, whence London pumps a supply for a town of 30,000, it will be an economical way of obtaining what we are sure will be pure water.

St. Catharines draws her life-giving supplies from a mountain stream, which unlike Glasgow's classic mountain supply, bears, we understand, the prosaic name of DeCoo's *Crick*. Let none suppose that its crystal purity is diminished by any such lactical fluid as the name might suggest. On the contrary we understand the town of St. Kits boasts of her purity in this as in other respects. We trust that the use of public water is extending, as we understand that her sewerage system is being enlarged.