eases were reported; in 1898, under the new treatment, the number was only 900. In Boston the death rate from these causes averaged nearly 31 per cent. from 1880 to 1894; from 1894 to 1897 it was only 12.6 per cent. In Chicago the rate prior to 1895 had been over 30 per cent.; since then it has fallen below 10 per cent.

Prior to the introduction of the anti-toxin treatment recovery from croup was rare, unless effected by tracheotomy or insubation. Reports upon 5,546 cases before 1892 showed a death rate of nearly 70 per cent. Another investigator collected reports of 12,736 cases occurring prior to 1887, where the death rate was 73. Now all this is changed, and out of 1,074 cases reported to the American Society of Pediatrics only 668 required surgical treatment, and the percentage of recovery for all was nearly 79 per cent., as contrasted with a former death rate of 70 per cent. Tracheotomy is now giving way to the milder operation of intubation, and even this is becoming less and less necessary, owing to the prompt application of the new remedy. It has been stated by Dr. Behring that if this remedy could be applied on the first day of the disease there would be practically no mortality from diphtheria, and Dr. Kinyoun fully concurs in this.

The question at once arises here why anti-toxin may not be administered to persons exposed to a diphtheria or croup epidemic as an immunizing agent, as vaccine virus is used against possible exposure to smallpox. While the two diseases differ materially in the nature of their origin, there is good reason for believing that preventive treatment may be as successfully pursued in the one case as the other. So far as tried, it has met the most sanguine expectations. It is mentioned in the Forum article that a Dr. Briggs has collected reports of 20 000 cases of exposure to diphtheria which have been treated with immunizing doses of antitoxin, and only one fatal case was known to occur, while only 109 cases of the disease in a very mild form developed. It may soon be that "anti-toxication" will be made as prevalent among children and others as vaccination.—The Sanitarian.

## COLD WATER vs. MEDICINAL TONICS.

The numerous medicinal tonics, so called, are universally toxic in character. Whatever tonic effects they may seem to produce are due to the fact that the system is aroused to resist their influence and to expel them from the body; and