"Reprinted from the Canadian Record of Science, January, 1892."

On the Collection of Samples of Water for Bacteriological Analysis.

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(One Plate.)

I have been prompted to describe my method of collecting samples of water for bacteriological examination, in the hope of its being of service to those who are anxious to do field work in this department of bacteriology.

Certain principles govern this work which cannet be neglected without introducing serious sources of error. First, the bottles in which the samples are to be taken must be sterilized by a dry heat of 150° C. and afterwards kept out of the reach of contamination from outside sources (especially from dust) until the moment when the water is collected. To this end the mouths of the bottles must be kept from contact with the fingers, and the stopper is only to be removed in the water. Second, the manipulations must be rapid enough to permit of a large number of separate samples being collected, and finally, these should be taken from such points as will ensure their affording a fair index of the body of water under examination, as the number of bacteria in samples taken at different places from the same water often varies considerably.

The method usually adopted, that of immersing the bottle at arm's length and removing the stopper under water, though fraught with much personal discomfort in cold weather, is tolerably secure from contamination at the mouth of the bottle, but it has the disadvantage of only giving