ginally designed to enable a sample to be collected at any required depth with the same safety and precision as at the surface, but as it also fulfils all the precautions for collecting samples in general and saves one the necessity of repeatedly plunging one's arm into the water, I employ it whenever a sample is to be collected from an open body of water. In securing samples by hand from a stream I was previously under the necessity of either securing the services of a boat or else taking the sample from off the bank, with the great chance that in the latter case the shallow water near the shore might not be typical of the general body of the stream. But from this apparatus, which can be lowered into the water from a bridge, or by a rod, much more uniform results are obtained.

As the apparatus left little to be desired, as far as regards the rapidity and safety with which the act of collecting is performed, it only remained necessary to ensure the necks of the bottles against contamination previous to using them. Instead of using sterilized rubber caps for each bottle, a constant source of trouble and annoyance, I had a tin box made which holds forty bottles at once, each kept in position by cross partitions of tin. The bottles are numbered serially, before sterilizing, by writing in pencil upon the ground glass of the stopper, and by noting where each bottle is used the use of labels is unnecessary. Instead of a simple lid, the cover of the box is a tray four inches deep, in which a lump of ice is placed in warm weather. A small tube at one of the corners of this tray conducts the water away as fast as the ice melts. I find this keeps the temperature within the box below 8° C., even in the hottest weather. A handle across the tray serves to carry the box, and a small padlock in front guards it against an ever too inquisitive public.

Though I have not yet had cause to use it for this purpose, I think that my box, with its lump of ice on top, would form a better means of sending samples of water by express than any I have seen recommended. The temperature is kept down to a point where no increase of the