If we now assume an ounce of water to weigh five hundred grains, one part of Strychnia can be detected in 64,000 of water. I know that an ounce should contain only 480 grains, but it was the fluid ounce that I used and I have no doubt but it contained the 500 grains in full.

With the Bichromate test, I find it very difficult to distinguish any sensible changes of colour if the solution be weaker than one part in 16,000, or one grain in a quart of water, and then it must be compared with a similar solution, acted on in the same way but wanting the alkaloid.

The Bromine test is not nearly so delicate as that of Iodine, only detecting about one part in 16,000; the principle reason, I think of this, is that the colour of the precipitate with this is so much lighter than that with Iodine, that in very dilute mixtures it cannot be seen, the one giving a light orange tint, where the other gives a dark brick red or brown; the latter, as a matter not to be doubted, produces more opacity in mixtures than the former.

The Chlorine test is not at all delicate so to speak when the mixtures are dilute, and when the Iodine test gives a very dark heavy precipitate, the former can scarcely be recognised.

To Extract Strychnia from Organic Compounds.—By similar testing as in plain liquids, Strychnia can be separated from any organic solution in which it is contained, if it be even present in small quantity. It can then be obtained in its pure alkaloidal state and perfectly colourless if required.

This method, therefore, is of great use, because by it we are not only made sure of the presence of Strychnia by the compound it forms, but we may also examine it in the same state as if it were realy pure.

To detect it in organic mixtures, it is requisite first to add the Iodine test to the liquid supposed to contain the Strychnia, then obtain the precipitate and wash it: and second, treat this precipitate with potassa in solution, when all the Iodine is abstracted from it and only Strychnia remains. If the quantities operated on be very minute, the alkaloid, may not at first make its appearance as it is disseminated through the liquid, but after a while flakey gelatinous looking objects form and settle to the bottom. This is to be carefully washed, as an excess of water would dissolve it. I have found in some cases that no precipitate was formed after the addition of liquor potassae for four or five hours, but when collected, it has proved to contain Strychnine.

Chloroform has been recommended greatly as a solvent for Strychnia; and if so, it would be of the greatest utility when manipulating with such small quantities, as this solvent being insoluble in aqueous fluids,