Contributed and Selected

DETERMINATION OF ALCOHOL IN TINCTURE OF IODINE.

AZOR THURSTON AND A. N. THURSTON.

As heretofore published[1] methods proposed for determining alcohol in tincture of iodine are very unsatisfactory, mainly owing to the time necessary for inversion of iodine with mercury as suggested by Alcock[2] or with iron filings or zinc as proposed by Roscoe & Schorlemmer[3].

The writers propose to fix the free iodine with sodium thiosulphate and then add sodium hydroxide to neutralize the sulphurous acid that may be formed when distilling. This procedure has the advantage of being rapid and giving practically accurate results.

The details are as follows: Decolorize 50 cubic centimeters of the tincture with a saturated solution of sodium thiosulphate, add 5 cubic centimeters saturated solution of sodium hydroxide and a few pieces of pumice to prevent bumping. Distill until all the alcohol comes over and make up the distillate with water to 100 cubic centimeters. Determine the alcohol in the usual manner with a pycnometer. Multiply the percentage of alcohol obtained by two and the result will be practically the percentage of absolute alcohol in the tincture.

Tincture of iodine prepared with alcohol of official strength should contain close to 92 per cent. of absolute alcohol by volume, as the iodine and iodide of potassium replaces from 3 to 4 cubic centimeters of alcohol in each 100 cubic centimeters of the finished product. There is, also, a difference in the temperature at which the tincture is prepared and that at which the alcohol is generally determined, therefore we think a tincture containing 90 to 91 per cent. of absolute alcohol by volume, should not be considered adulterated.

Grand Rapids, Ohio, Sept. 7, 1912.

A RAPID ACCURATE METHOD FOR THE QUANTITATIVE ESTIMATION OF CHLOROFORM IN CHLOROFORM LINIMENT.*

JOSEPH L. MAYER.

A member of the Revision Committee of the Pharmacopœia, recently called my attention to the advantage of making official a method for the quantitative determination of chloroform in chloroform liniment, and the lack of a published process for the same.

[1]Jr. Ind. and Eng. Chem., Vol. 1, 789. Merck's Report, Vol. 19, 35.
[2]Proc. A. Ph. A., 1904, 583.
[3]Treatise of Chemistry, Vol. 1, 157.

*Read before the New York State Pharmaceutical Association, June 25, 1912.