A METHOD FOR THE ESTIMATION OF ALOIN IN ALOES.

BY C. H. BRIGGS.

In the JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION, Volume 12, No. 8, page 695, Engelhardt and Crosbie call attention to the fact that there is no reliable method available for the estimation of aloin in aloes. Some twenty years ago the writer had occasion to assay aloes and devised a process which has been in use in this laboratory ever since. While this method is not ideal in that it is somewhat long and tedious, it serves as a very good indication of the amount of aloin which can be obtained from aloes in the commercial manufacture of aloin. It is with the hope that this method may be of service to others that it is offered for publication.

The method is as follows:

Dissolve 50 grams of powdered aloes in 300 cc of boiling water; to the solution add 4 cc of 25% acetic acid; mix well and allow to cool. Decant the clear solution into a 500-cc graduate and wash the resin with water by decantation or on a filter, according to its nature. To the filtrate add a solution of 10 grams of lead acetate (if the aloes is very black use 15 grams) in water and dilute to 500 cc. Shake well and filter with suction. Remove the lead from the filtrate by hydrogen sulphide and filter again with suction. Measure off exactly 400 cc of the clear filtrate representing 40 grams of aloes, concentrate *in vacuo* to about 30 cc; transfer to a 50-cc graduate washing out the flask with small portions of water until the solution equals 40 to 43 cc. Allow the aloin to crystallize for one day at ordinary temperature and then place in a refrigerator for another 24 hours. Filter with suction and wash crystals with a saturated aqueous solution of aloin until the mother liquor has been all washed out. Transfer crystals to a tared watch glass and dry. After weighing, the crystals should be exposed to the air for several hours in order that they may absorb hygroscopic moisture and then be re-weighed and thus furnish a representative assay of the aloin as ordinarily manufactured.

As this assay is dependent upon a process of crystallization, three duplicate assays should be made of each sample and the highest results reported.

ANALYTICAL DEPARTMENT,
PARKE, DAVIS & COMPANY,
DETROIT, MICHIGAN.
August 22, 1923.

THE TANNIN OF WILD CHERRY BARK.*

BY JOSIAH C. AND BERTHA L. DE G. PEACOCK.

In 1834, Stephen Proctor published in *The American Journal of Pharmacy* the results of an investigation which he had made of the constituents of wild cherry bark. In this report, besides the presence of certain other substances, he inferred that this drug contains tannin and gallic acid.

His analysis appears to have been made the basis of nearly every later reference by the textbooks to the constituents of this bark. But the presence of gallic acid has not been mentioned by all, nor would it likely be credited without question by any who consult the original article, for the inference was drawn contrary to the evidence afforded by an appropriate test—the iron salt he used gave a green color, not the blue one which gallic acid produces.

The astringency of wild cherry bark seems to have been attributed to "tannin," with little, if any, regard to possible presence of gallic acid.

* Read before Pennsylvania Pharmaceutical Association, 1923.