It will be noted that each chemist checks himself fairly well, but that there is very little agreement between any pair of results. While the highest result recorded is more than double that of the lowest, making a comparative error over 100%, and while the figures reported extend beyond both the minimum and maximum limits of the Pharmacopœia, it must be borne in mind that the total absolute difference is less than $^1/_{15}$ grain—a check that, in the assay of other alkaloidal drugs, would be considered close agreement indeed.

The results recorded below were obtained from galenicals purchased in the open market and assayed previous to the standard tincture.

TINCTURE OF HYOSCYAMUS.

	Chemist C.		Chemist B.		Chemist D.*
1	0.0039	0.0038			
2	0.0043	0.0058			
3	0.0055	0.0060			
4	0.0032	0.0043			
5	0.0060	0.0063			
6	0.0042	0.0039			0.0044
7	0.0052	0.0058			0.0051
8	0.0052		0.0075	0.0082	
9	0.0046		0.0072	0.0062	

* Analyst at Federal Food and Drug Control Laboratory.

Conclusion—It appears that the Proximate Assay method prescribed by the U. S. P. for its alkaloidal preparations is not sufficiently accurate when used to standardize a galenical containing such a minute quantity of alkaloid as the Tincture of Hyoscyamus.

BUREAU OF CHEMISTRY,
MARYLAND STATE HEALTH DEPARTMENT.

THE ALLEGED INCOMPATIBILITY OF ACID SODIUM PHOSPHATE AND METHENAMINE.*

BY BERNARD FANTUS AND CLYDE M. SNOW.

Methenamine and Acid Sodium Phosphate are frequently given alongside of each other so as to acidify the urine and in this manner secure the liberation of formaldehyde, upon which its activity as a urinary antiseptic depends. It is generally advocated that the two be given separately, so as to avoid the premature liberation of the formaldehyde by the acid sodium phosphate.

Attention is called by a correspondent in the *Journal of the American Medical Association* (vol. 85 (July 18) 1925, pp. 214, 215) to the fact that in the Pharmacopœia of the London Hospitals there appears a mixture under the name of "Mistura Hexaminæ" containing both methenamine and acid sodium phosphate combined. In view of the fact that it is sometimes quite an inconvenience for a patient to carry with him two separate bottles of medicine, the question as to the degree of incompatibility of the two agents, and the desirability of the formulas given in the "London Hospitals' Formulary" becomes of practical interest.

* Section on Practical Pharmacy and Dispensing, A. PH. A., Des Moines meeting, 1925.

We have therefore prepared a solution containing Methenamine 3 Gm., Acid Sodium Phosphate 9 Gm., in Distilled Water 120 cc., and obtained a faint reaction for free formaldehyde immediately after mixing. The reaction, however, is much less intense than the one obtained in a solution of the same amount of methenamine in 0.2 per cent hydrochloric acid, which is approximately the acidity of the gastric juice. The reason for this can be readily understood when we compare the hydrogen-ion concentration of the two solutions. With the acid sodium phosphate mixture it is p_H 5.6, while the p_H of the hydrochloric acid mixture is 2.6 approximately. In the course of days, when kept at ordinary room temperature and in diffused light, the formaldehyde reaction in the solutions increases and possibly a very faint odor of formaldehyde becomes perceptible. However, when recently prepared, the acid-sodium-phosphate-methenamine mixture is not at all objectionable in odor or taste, and as it contains considerably less free acid and therefore less free formaldehyde than would be liberated in the stomach with its higher p_H content, it would seem entirely justifiable to administer it in this way.

In view of these facts, it seems that a formula for such mixture might be incorporated in the "Unofficial Formulary." We submit the following:

LIQUOR METHENAMINÆ ACIDUS

Acid Solution of Methenaminæ

Methenamine	8 Gm.
Acid Sodium Phosphate	24 Gm.
Distilled Water to make	100 cc.

This solution should not be dispensed unless recently prepared.

AVERAGE DOSE: 1 teaspoonful.

We have here an interesting example of a theoretic incompatibility of no practical importance.

HOSPITAL PHARMACY PROBLEMS.*

As Shown by the Inquiries Received by the Hospital Library and Service Bureau.[1]

BY HENRY J. GOECKEL.[2]

During the past few years several papers were presented at the conventions of the AMERICAN PHARMACEUTICAL ASSOCIATION and contributed to the JOURNAL, which discussed various phases of pharmacy education and practice in relation to hospital activities. As the writer believes that many of pharmacy's professional and educational problems as well as those of practical therapeusis can be solved in a satisfactory manner only when this branch of pharmaceutical activities is properly developed—he has given much attention to the subject. Having since the last Convention been called upon by the Director of the Hospital Library and Service Bureau for information to enable her to answer some inquiries on which no data

* Section on Practical Pharmacy and Dispensing, A. PH. A., Des Moines meeting, 1925.

[1] The Hospital Library and Service Bureau, located at 22 E. Ontario Street, Chicago, Ill., U. S. A., is maintained and supported by the various associations interested in hospital activities. One of the large educational foundations aided in its establishment.

[2] Consulting pathologist, Somerset Hospital, Somerville, N. J.