

Present day hypnotics, with comparative value and uses. Qualities desired in hypnotics and present research in this field.

*Research on anesthetics:* ROGER ADAMS. Former anesthetics and their uses and drawbacks. Transition from natural to improved synthetic products. Qualifications of a good anesthetic and how the problem is being solved.

*Improvements in the methods for arsenic estimation:* H. V. FARR. A very brief review of the methods in present use is given. In addition to this a variation in the Gutzeit method is outlined, whereby the preliminary preparation of the chemical in ordinary cases is eliminated. Sulphites, etc., are oxidized by bromine and the arsenic subsequently reduced by potassium iodide, both of these reactions being accomplished within the reaction cell while the test is going on, representing a very great saving of time. In addition to this some simple methods for removing metals which interfere with the Gutzeit test are outlined, thus rendering this method more widely applicable. A gravimetric method for determining arsenic in the metallic form where this metal is present in considerable amounts is outlined. This is particularly applicable in cases where the simpler volumetric methods can not be used.

*The colorimetric estimation of adrenalin:* WILBUR L. SCOVILLE. Solutions of adrenalin are necessarily acid, if kept in stock, in order to preserve the activity. This acid has a marked effect upon the color produced. The official process is designed for the estimation of adrenalin in the dried glands, and will apply to these, but is not satisfactory for commercial solutions. A method is given which is applicable to both, and which the author considers preferable to the official process. It is based upon Krauss's method, using potassium iodate as the oxidizing agent and pure adrenalin as a standard.

*Stability of chloramine antiseptics:* JULES BEBIE. In order to assure the greatest possible degree of stability the chloramines must be produced with a high degree of purity. Investigation extended over period of one year indicates that chloramine-T in crystal and tablet form, by itself or when mixed with  $\text{NaHCO}_3$  is stable. Aqueous solutions of chloramine-T alone or in mixture with  $\text{Na}_2\text{CO}_3$  or  $\text{NaCl}$  are also stable. Dichloramine-T in powder form begins to deteriorate after about three months. The crystallized commercial product, however, is stable for about 8 months, and after 14 months shows only very slight degree of

decomposition. Solutions of crystallized dichloramine-T in chlorosane are fairly stable for a couple of weeks. Halazone is fairly stable. Decomposition after one year amounts to about 3 per cent.

*The determination of the melting point and free salicylic acid content of acetylsalicylic acid:* L. A. WATT. A comparison of the methods in general use for the determination of the melting point of acetylsalicylic acid. The desirability of a uniform procedure is emphasized by the variation in the results obtained. For estimating the free salicylic acid content, comparison with a set of standards made from a mixed dye solution permits the close approximation of the violet color produced by the addition of ferric chloride to the acetylsalicylic acid solution.

*The biologic methods for digitalis assay:* HERBERT C. HAMILTON. The author questions the relevancy of certain criticisms of biologic assay on the ground that such an assay is limited in its scope. Biologic assays are not to decide the question of dosage nor the applicability of the drug for any particular purpose nor does a biologic assay merely record that a drug will kill an animal and permit the inference that the drug is standardized. A biologic assay is a comparison of the sample in question with a similar preparation of known activity. The comparison of effects is made on some test animal which responds to the action of the drug in so characteristic a manner that the effect is measurable. The proposed methods for digitalis with their advantages and disadvantages are described at length in order to emphasize the scope and limitations of the biologic assay of the digitalis series.

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Secretary

(To be continued)

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