EDITORIAL NOTES

NEW AND NONOFFICIAL REMEDIES.

The following additional articles have been accepted as conforming to the rules of the Council on Pharmacy and Chemistry of the American Medical Association for admission to New and Nonofficial Remedies. A copy of the Rules on which the Council bases its action will be sent on application.

W. A. PUCKNER, *Secretary.*

BISMARSEN.—Sulpharsphenamine.—Bismuth.—Bismuth Arsphenamine Sulphonate.—The sodium salt of a bismuth derivative of arsphenamine methylene sulphonic acid (the exact structural formula of which has not been established) with inorganic salts. It contains approximately 13 per cent of arsenic and 24 per cent of bismuth.

Actions and Uses.—For the treatment of syphilis. According to Stokes and Chambers (*J. A. M. A.*, 89 (Oct. 29, 1927), 1500) the drug is somewhat slower in its action than intramuscularly administered sulpharsphenamine or intravenously administered neoarsphenamine, but much more rapid than bismuth. More or less severe pains at the site of injection have been reported.

Dosage.—Bismarsen is administered intramuscularly. The initial dose is 0.1 Gm.; for succeeding doses Stokes and Chambers used 0.2 Gm. each of the drug dissolved in ampul with 1 cc. of sterile distilled water at the time of administration, adding to the solution 2 to 3 drops of a 2 per cent solution of butyn. At the time of reporting, however, the authors questioned the desirability of using the local anesthetic. Weekly increasing to biweekly doses were used in treatment courses of twenty doses.

Manufactured by the Abbott Laboratories, North Chicago, Ill. U. S. patent 1,605,691 (Nov. 2, 1926; expires 1943). U. S. trademark applied for.

Bismarsen is a brownish yellow amorphous powder readily soluble in water, yielding a yellow solution which is slightly alkaline to litmus.

Add 2 cc. of diluted hydrochloric acid to 5 cc. of a 1 per cent solution of bismarsen: a white opalescence appears and dissolves almost immediately; a heavy white gelatinous precipitate develops in two minutes. Add 1 cc. of diluted nitric acid to 5 cc. of a 1 per cent solution of bismarsen: the solution gradually turns brown and yields a precipitate. Add 1 cc. of trinitrophenol solution to 5 cc. of a 1 per cent solution of bismarsen: no apparent reaction takes place (*distinction from silver arsphenamine and potassium bismuth tartrate*). Bubble hydrogen sulphide through a 1 per cent solution of bismarsen: the solution darkens immediately but no precipitate is formed. Add 5 cc. of hydrogen peroxide solution to 5 cc. of a 1 per cent solution of bismarsen: the solution is at first turbid, then becomes a deep reddish brown with formation of a precipitate. Add 1 cc. of mercuric potassium iodide solution to 5 cc. of a 1 per cent solution of bismarsen: the solution yields a greenish yellow opalescence, which in turn assumes a dirty green color on standing. Add drop by drop 2 cc. of a 40 per cent sodium hydroxide solution to 5 cc. of a 1 per cent solution of bismarsen: the solution gradually darkens without any formation of precipitate. Add 0.5 cc. of a 2 per cent silver nitrate solution to 5 cc. of a 1 per cent solution of bismarsen: a dark red solution is produced (*distinction from arsphenamine*). Add 1 cc. of a saturated solution of bromine in water to 5 cc. of a 1 per cent solution of bismarsen: the solution yields a greenish brown precipitate (*distinction from sulpharsphenamine, neoarsphenamine and arsphenamine*). Add 0.5 Gm. of zinc dust and 5 cc. of diluted hydrochloric acid to 0.1 Gm. of bismarsen in a test-tube, at the mouth of the tube hold a strip of filter paper moistened with 5 per cent cadmium chloride solution: the paper turns yellow in four minutes.

Transfer about 0.4 Gm. of bismarsen, accurately weighed, to a Kjeldahl flask, add 2 cc. of sulphuric acid and heat carefully; add 2 cc. of nitric acid a drop at a time, continue heating until brown fumes cease to be given off, cool and add water to make 120 cc., if a white crystalline precipitate appears dissolve it with a few drops of hydrochloric acid; transfer to a 250-cc. beaker, add 7 Gm. of tartaric acid, neutralize with strong ammonia water, add 10 cc. of magnesia mixture followed by 20 cc. stronger ammonia water, allow to stand twelve hours, filter through a hard surface filter paper and wash the precipitate with 50 cc. of 2.5 per cent ammonia water, puncture the filter, transfer the precipitate into a 250-cc. beaker with washings, then add just sufficient hydrochloric acid to dissolve the precipitate, filter, wash the filter well with water, neutralize the filtrate with stronger ammonia water; add 1 cc. of magnesia mixture and 20 cc. of stronger ammonia water; allow to stand twelve hours; filter, using a prepared Gooch crucible; wash with 2.5 per cent ammonia water; dry at 100° C.; ignite at 700° C. for three hours; cool in a desiccator and weigh

as magnesium pyroarsenate and calculate to arsenic: the arsenic content is not less than 12.50 per cent. nor more than 13.50 per cent. Transfer about 0.25 Gm. of bismarsen accurately weighed to an Erlenmeyer flask. Add 5 cc. of diluted sulphuric acid followed by 1 Gm. of powdered potassium permanganate, and 10 cc. of sulphuric acid in small portions; add just sufficient hydrogen peroxide to dissolve the brown precipitate; add 50 cc. of water; boil for twenty minutes; cool to 70° C.; saturate with hydrogen sulphide for twelve hours; filter, using a prepared Gooch crucible; wash the precipitate with water, warm ammonium polysulphide, methyl alcohol, carbon bisulphide and acetone in the order named; dry at 100° C.; cool in a desiccator and weigh as bismuth sulphide (Bi_2S_3); calculate to bismuth: the percentage of bismuth found corresponds with the percentage of arsenic found multiplied by 1.86 (factor As to P_i in $C_{11}H_{11}O_{15}As_3Na_3S_3N_3Bi_2$) plus or minus 0.5 per cent.

From *Jour. A. M. A.* for June 8, 1929.

BIRTHPLACE OF JUSTUS VON LIEBIG TO BECOME MUSEUM.

Last July the Vereinigung Liebighaus was established for the purpose of preserving and maintaining as a museum the rebuilt birthplace of Justus von Liebig in Darmstadt. Memorabilia of Liebig and of others have been brought together in this house. In it also is to be portrayed the development of all those industries which von Liebig established or upon which he had a decided influence. The following are directors of the organization named: A. von Weinberg, of Frankfurt a/M, *Chairman;* E. Berl, of Darmstadt, *Vice-Chairman;* Karl Merck of Darmstadt, *Treasurer;* Councilor in the Ministry K. Lohlein, of Darmstadt, and Mayor Buxbaum, of Darmstadt. Additional auxiliary directors have also been named.

WHAT DRUGS DO YOU USE?

The Committee on Revision of the Pharmacopœia of the United States has mailed a questionnaire to physicians and pharmacists throughout the country requesting them to indicate thereon to what extent there is a professional demand for medicinal products which were official in the eighth or ninth revisions of the Pharmacopœia, but which were not admitted to the tenth revision. The Committee requests pharmacists and physicians to mark O, indicating often, R, implying rarely or N, meaning never, the number of times these medicinal products have been ordered in their stores. Pharmacists and physicians should coöperate with the Committee by answering this questionnaire, and mailing it to Chairman E. Fullerton Cook, 636 South Franklin Square, Philadelphia.

DIGITALIS ASSAY.

The assay of digitalis by various methods with special consideration of Mansfeld's frog-heart sinus method, by A. Stasiak and B. Zboray, *Arch. Exp. Path. Pharm.*, 144 (1929), 283. Comparative assays were made of four digitalis powders using the frog-heart sinus method of Mansfeld and Horn, the six-hour frog method and the cat method. The first method was studied comprehensively and it was found that it is advisable to make comparisons of the resulting values with the international digitalis standard rather than with *g*-strophanthin as suggested by the originators. It is recommended that with each measurement by the sinus method a simultaneous assay be made of a digitalis standard preparation. Conducted in this way the sinus method gave good, consistent results. The differences between the values obtained by the sinus method and six-hour frog and cat methods were of the same general order as those found between the latter two methods. Valuable tabulations list the results.—J. P.—*The Squibb Abstract Bulletin*, Oct. 16, 1929.

THE AMERICAN PHARMACEUTICAL MANUFACTURERS' ASSOCIATION.

Matters of considerable importance in connection with the future publicity and research program of the American Pharmaceutical Manufacturers' Association will be discussed and decided upon at the semi-annual meeting of that organization which will be held in the Hotel Washington, Washington, D. C., December 16 and 17, 1929. The meeting to be held on the first day will be given over largely to problems of executive nature and a general discussion of means and ways of obtaining greater efficiency and economy in distribution.

The second day will be devoted primarily to meeting members of the various Government bureaus and departments with which the members of the Association come in contact in the course of their daily activities. A visit to the Food, Drug and Insecticide Administration, Department of Agriculture and to the Prohibition and Narcotic Divisions of the Treasury Department will occupy the forenoon of December 17th. At the luncheon on this day, Senator George H. Moses will be the guest of honor and will address the members. The afternoon will be devoted to addresses by other Government officials and reading and discussion of the reports of the Research Board and the Contact Committee of the Association.

Among the important topics to be discussed in the executive sessions are: Publicity, the Proposed Census of Dispensing Physicians,

Institutional Advertising and the "Consult your Family Physician" campaign. The officers of the Association are:

President, H. Sheridan Baketel; *Vice-Presidents*, Henry Osterman, E. P. Crowe; *Secretary*, John G. Searle; *Treasurer*, Frank A. Mallett.

OBITUARY.

EDWARD EMERY SLOSSON.

Dr. Edward Emery Slosson, widely known scientist, director of Science Service, and author of "Creative Chemistry," died at his home in Washington, D. C., October 15th, after an illness of several months, aged sixty-four years. Born in Albany, Kansas, June 7, 1865, he received his degree of B.Sc. from the University of Kansas in 1890 and a Master's degree two years later. Ten years later he received his Ph.D. degree from the University of Chicago. From 1891 to 1903 he occupied the chair of chemistry at the University of Wyoming, and during the same period was also chemist for the Wyoming Agricultural Experiment Station. For seventeen years following, he was literary editor of *The Independent*.

Dr. Slosson was well known for his book, "Creative Chemistry." Among his other writings were "Easy Lessons in Einstein," "Chats on Science," "Sermons of a Chemist," "Great American Universities," "Six Major Prophets" and "Plots and Personalities." He was for eight years a member of the faculty of the Columbia School of Journalism. He was a member of the Authors' Club, of New York and the Cosmos Club, of Washington. Surviving him are his wife and a son, Preston William Slosson, associate professor of History at the University of Michigan.

BOOK NOTICES AND REVIEWS.

Allen's Commercial Organic Analysis—Vol. VII. Fifth edition rewritten, revised and reset. Publishers, P. Blakiston Sons & Co. Editor, C. AINSWORTH MITCHELL. Price $7.50.

This is the seventh volume of the well-known treatise on the properties, modes of analysis, approximate and analytical examination, methods for detection and estimation of impurities, adulterations, products of decomposition, etc. This work is so well and favorably known that a review, except in outline, is unnecessary.

Volume VII has been enlarged over previous editions by 306 pages. The sections on the vegetable alkaloids have been brought together in one volume which facilitates the use of the work in the laboratory. The alphabetical grouping has been adopted in the chemical classification, and the alkaloids have been arranged in the alphabetical order of the names of the plants which produce them and, as far as this is possible, the alphabetical arrangement has been followed throughout. The introduction to the vegetable alkaloids has been prepared by Dr. T. A. Henry, of London, and the general section on alkaloids by T. M. Sharpe.

The several divisions of the alkaloids have been prepared under the editorship of the following: Francis H. Carr, *The Aconite Alkaloids;* E. Horton, *Berberine and Its Associates;* J. J. Fox and P. J. Sageman, *Caffeine, Tea and Coffee;* Oliver Chick, *Cinchona Alkaloids;* Samuel P. Sadtler, *Cocaine;* R. Whymper, *Cocoa and Chocolate;* R. W. Tonkin, *Nicotine and Tobacco;* Frank O. Taylor, *Opium Alkaloids;* C. Ainsworth Mitchell, *Strychnos Alkaloids;* Francis H. Carr, *The Tropine Alkaloids; Atropine and Its Allies, Tropeines* and *Scopoleines.*

As usual each division is complete and comprehensive. The tables of contents of the volumes that have been published can be obtained by writing to the publishers.

Pharmaceutical Formulas. Tenth edition. By S. W. WOOLLEY AND G. P. FORRESTER, published by the Chemist and Druggist, 42 Cannot St., London, E. C. 4. Price 15s., postage 9d.

The fact that "Pharmaceutical Formulas" has gone through 10 revisions is indicative of the value of the book. This edition, as the former revisions, is a collection of new and old formulas for which there is more-or-less demand not only in Great Britain but in all parts of the world. It is a matter of impossibility for a pharmacist to get along without formulas and this publication of more than 1100 pages will be found valuable and useful, because of the careful selection from pharmacopœias and formularies of every country. The greater number, of course, are of British origin. That preparations in demand in the U. S. are listed is indicated by the statement that permission has