EDITORIAL NOTES

UNITED STATES CONSTITUTION SESQUICENTENNIAL CELEBRATION.

Organizations have been invited to participate in the sesquicentennial celebration, among them the AMERICAN PHARMACEUTICAL ASSOCIATION. The occasion is to be observed this year.

PHARMACISTS IN THE ARMY.

The committe of the council of the Pharmaceutical Society, Great Britain, reported that they had received a report from Professor Gunn concerning conversations which had suggesting directions in which the War Office might be further approached on this question, and had remitted these proposals to a subcommittee for further consideration. The subcommittee had also been requested to examine the motion proposed by Mr. McNeal—"That a Corps of Pharmacists be established and trained in those duties which they would be called upon to perform in the event of war while serving with His Majesty's Forces."

The term "dispenser" or "dispensing chemist" for certain appointments held by pharmacists is to be substituted by "pharmacist." The secretary was instructed to communicate above information to the British Hospitals' Association in respect of voluntary hospitals, the Ministry of Health and the Wholesale Drug Trade Association.

A communication was read from the *Deutscher Apotheker*-führer relative to the possibility of arrangements being made between England and Germany for interchange of pharmacists, for limited periods, for the purpose of gaining experience. A similar inquiry came privately to the secretary from Switzerland.—The above is abstracted from the "London Letter" to the *Australasian Journal of Pharmacy* for January.

THE STIMULATION OF PLANT GROWTH.

The modern discovery that drugs can be administered as it were through the stem in homeopathic doses is one of considerable interest and importance. This was foreshadowed some twenty-five years ago by the work of H. E. and E. F. Armstrong on the leaves of the cherry laurel and the spotted Aucuba, when they showed that a considerable number of substances were able to enter the leaf and initiate changes which, in brief, may be described as altering the water balance of the cell content and setting enzymic changes in motion, resulting in hydrolysis as was made manifest by the destruction of the glycosides. This work was an extension of the earlier and now classic experiments of Adrian Brown on the penetration of the semi-permeable membrane of the barley seed. The more recent observations made in connection with the ripening of fruits has shown that a vapor, proved to be ethylene, produced during ripening, is able to penetrate other partly ripe fruits and thereby hasten the process of ripening. A new discovery involves the application of small quantities of the particular chemical mixed with lanolin, which is smeared on the stem. In this way it is able to penetrate through the differential septa, pass into the cells behind, and initiate chemical changes. If the stimulus is not too vigorous, the result is accelerated growth and particularly the formation of rootlets at or near the infected part, with the very important practical consequence that the formation of roots by cuttings is much facilitated. A discovery which may be of prime importance to practical horticulture has been made.—From *Chemistry and Industry* (England).

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.—PAUL NICHOLAS LEECH, *Secretary*.

PROTAMINE ZINC INSULIN.—A preparation of insulin modified by appropriate addition of protamine and a zinc salt. When this modified preparation in its precipitated form is brought into uniform suspension, each cubic centimeter contains 40 units of insulin together with from 0.30 to 0.50 mg. of protamine and from 0.08 to 0.10 mg. of zinc. The preparation contains, in addition, sufficient disodium acid phosphate to maintain its hydrogen-ion concentration at not more than that corresponding to $p_H = 7.1$ and not less than that corresponding to $p_H = 7.4$. This buffering agent, in terms of its anhydrous salt (Na_2HPO_4), represents not less than 0.15 per cent and not more than 0.20 per cent of the final product. The preparation also con-

tains approximately 1.6 per cent of glycerin as an agent for achieving of isotonicity, and 0.20 per cent of cresol or 0.25 per cent of phenol as a preservative.

Actions and Uses.—The effects of protamine zinc insulin are as described under Insulin-N. N. R., except that the blood-sugar-lowering action of unmodified insulin becomes maximal in from two to three hours, whereas the blood-sugar-lowering action of protamine zinc insulin is prolonged and has its greatest effect in about twelve to twenty-four hours after administration.

Protamine zinc insulin may be used in the case of any patient where regulation of diet is incapable of removing the cardinal objective symptoms of diabetes mellitus, and may replace, wholly or partly, the use of unmodified insulin in the treatment of the patient. In some cases the use of unmodified insulin alone is desirable; in others, protamine zinc insulin alone is indicated; while in others, the use of both preparations gives best results.

In view of the prolonged action of protamine zinc insulin, the chief indications for its use are in those cases where unmodified insulin is unable to provide control, without being administered in several doses daily, or is unable to provide adequate control unaccompanied by frequent hypoglycemic reactions, ketosis, or evidence of pronounced fluctuations in blood-sugar levels. The usefulness of protamine zinc insulin in cases of diabetic coma, in diabetes complicated by infection, or in the event of surgical operations has not been definitely established. In such instances, therefore, the use of protamine zinc insulin to supplant the use of unmodified insulin is not recommended.

Dosage.—The general principles underlying the administration of protamine zinc insulin are the same as those governing the administration of unmodified insulin (see Insulin-N. N. R.). (The omitted paragraphs may be found in the complete report of the *Journal A. M. A.*, February 20, 1937, page 640.)

In protamine zinc insulin, the insulin component is derived from batches previously tested and approved in their unmodified form; the protamine component is derived from sperm or mature testes of fish belonging to the family Salmonidæ, genus Oncorhynchus, Salmo or Trutta; and the zinc component is derived from a solution of zinc chloride (0.17 mg. of $ZnCl_2$ provides 0.08 mg. of zinc). Protamines are basic proteins of simple composition. These substances are prepared according to methods described by Kossel. (Kossel, A.: "The Protamines and Histones, in Monographs on Biochemistry," translated by W. U. Thorpe, 1928 ed., pp. 18–19.)

Protamine, Zinc & Iletin (Insulin, Lilly).—A brand of protamine zinc insulin.

Manufactured by Eli Lilly and Company, Indianapolis, under license from the governors of the University of Toronto.

Protamine, Zinc & Iletin (Insulin, Lilly), 10 cc.: Each cubic centimeter contains 40 units of insulin, together with protamine and approximately 0.08 mg. of zinc.

Protamine Zinc Insulin.—Squibb.—A brand of protamine zinc insulin.

Manufactured by E. R. Squibb & Sons, New York, under license from the governors of the University of Toronto.

Protamine Zinc Insulin.—Squibb, 10 cc.: Each cubic centimeter contains 40 units of insulin together with protamine and approximately 0.08 mg. of zinc.

Ichthyol Readmitted to N. N. R.—(See page 641, *Jour. A. M. A.*, February 20, 1937.)

SYNTHETIC MENTHOL.

Hiroshi Honguchi, of the Tokyo Industrial Experimental Laboratory, has produced synthetic menthol.

ACACIPETALIN.

Two scientists, Dr. Claude Rimington and Dr. O. G. Backeberg, of Witwatersrand University, have obtained from acacias of South Africa "acacipetalin," an hydrocyanic acid-containing substance. Cattle have been poisoned by eating parts of the plant.

DRUGGISTS AS INTERNS.

Due to a recent amendment to the New Jersey Pharmacy Practice Act, physicians in that state are to place their prescriptions in more expert hands than heretofore. The new amendment demands that a pharmacy graduate serve a one-year internship before he can qualify as a registered pharmacist. Requirements are as follows: Compounding a minimum of 600 prescriptions under the watchful eye of a licensed druggist; supervised filling of at least sixty orders for poison; visiting three to five physicians to discuss prescription dispensing; studying the manufacture and distribution of drugs. Embryo pharmacists must serve their internship in a so-called training pharmacy designated as such by the State Board of Pharmacy. Records of an applicant's career as an intern, compiled by himself and by his employer, must accompany his petition for a license.—From *Medical Economics*.

HOSPITAL PHARMACISTS.

We quote the following from the "Hospital Number" of the *Journal A. M. A.*, page 1047, March 27th:

"A total of 1419 hospitals reported that they employ 1901 pharmacists. Most, or all, of the states of the Union have laws regulating the practice of pharmacy, the handling of drugs in hospitals, as well as elsewhere, and provisions for registry under the state government.

"The Essentials of a Registered Hospital require that 'the handling of drugs should be adequately supervised and should comply with state laws.' "

INORGANIC INSECTICIDES.

"The possibilities for new insecticides among inorganic materials are not being overlooked. Cryolite—'sodium fluoaluminate' to the chemist—has been shown to give adequate control of the codling moth in the relatively dry Pacific Northwest, although it holds out less promise farther east. Unfortunately, fluorine, a component of cryolite, is poisonous to man as well as to insects and its removal from fruits has thus far proved difficult.

"Recent chemical analyses of a large number of commercial calcium arsenates—widely used insecticides that are less objectionable than lead arsenate from the spray residue standpoint and also less effective against most insect pests—revealed great differences in solubility and other characteristics...."—From a Press Bulletin, U. S. Department of Agriculture.

A JOURNAL AND REPRINT LIBRARY IN MAINE.

A journal and reprint reference library is being established at Lewiston, Maine, in the Central Maine General Hospital. Subscriptions have been made for forty-seven journals, and the library is cataloging and filing about 2000 reprints. This library is being established through a grant of the Bingham Associations. It will serve members of the Maine Medical Association, filling requests for loans of journals and reprints, and thus help the members prepare papers to be read before their various medical meetings. Each member of the Maine Medical Association is also requested to send to this library two copies of reprints of papers which they have published or will publish in the future. Requests for literature should be addressed to the Librarian of the Frederick Henry Gerrish Library, Central Maine General Hospital, Lewiston, Maine.—From American Medical Association Organization Section.

DIAMOND ANNIVERSARY OF SWEDISH PHARMACEUTICAL SOCIETY.

From a December number of *Farm. Revy* we learn that on December 6, 1936, a celebration in honor of the 75th jubilee of the Swedish Pharmaceutical Society (Farmaceutiska föreningen) was held in Stockholm with over 200 members in attendance. Among the guests of honor were: T. Thunberg, K. Ahlsberg, E. Ohlsson and G. Edman, also several representatives from pharmaceutical organizations in Norway, Denmark and Finland. The principal speaker, Apothecary S. Gullstrom, delivered an address on the lives of Priestley and Lavoisier, and at the dinner following, among other speeches, the same speaker discussed Scheele's work and proposed a toast to him.—*Courtesy of C. S. Leonard.*

PERSONAL AND NEWS ITEMS.

PROFESSIONAL SERVICE.

Chairman Anton Hogstad, Jr., of the National Pharmacy Week Committee, who has served as Special Assistant to the President, Merck & Co., Inc., during the past six years, and E. H. Rauth, director of advertising and editor of *Merck Report*, have resigned these positions to engage in the establishment of Anton Hogstad Associates at 136 Liberty St., New York City. The firm will render the professionally minded pharmacists of the United States and Canada a distinctive and exclusive type of professional service relative to the planning, conduct and development of American pharmacies.

The activities of Mr. Hogstad are well and favorably known. He planned the Prescription Shop of Hesselberg Drug Company in St. Louis and at other periods was member of the faculties of several schools of pharmacy and for a time served the Missouri Botanical Garden in important undertakings.

BANQUET AND RECEPTION IN HONOR OF DEAN AND MRS. HOWARD C. NEWTON.

The Alumni Association of the Massachusetts College of Pharmacy honored Dean and Mrs. Howard C. Newton at a banquet and reception in the beautiful George Robert White Hall of the College on March 11, 1937. Over 250 alumni and friends gathered for the occasion; among them were, William H. Glover, president of the Massachusetts College of Pharmacy, Dean Hugh C. Muldoon, former teacher of Chemistry at the College and now Dean of the Duquesne University School of Pharmacy, George A. Moulton, president of the National Association of Boards of Pharmacy, John Walsh, president of the Massachusetts State Board of Pharmacy, William B. Shangraw, president of the Vermont State Board, Henry C. Levick, president of the Boston Association of Retail Druggists, Martin Adamo, president