

were dedicated to public purposes. Attention was called to the fact that this provision was not contained in the Act of 1928.

The opinion relied also on decisions of the United States Supreme Court, which "has consistently held that a cession by a state to the United States of exclusive jurisdiction over a tract of land put the tract beyond the field of operation of all state laws except as to matters specifically reserved."

A SECOND SUPPLEMENT TO THE UNITED STATES PHARMACOPOEIA

At the recent meeting of the United States Pharmacopoeia Board of Trustees authority was given for the publication of the second United States Pharmacopoeia XI supplement. It is hoped that this can be issued on January 1, 1939.

Preparation has been under way for months, and subcommittee chairmen will be in a position in the near future to submit reports on a number of revised texts. The subcommittee on scope is also considering the admission of a number of additional important new drugs.

The members of the committee are fully familiar with the outstanding advantages of the interim revision and supplement features of the Pharmacopoeial program. This gives the opportunity to issue new standards after they have been subjected to extensive checking in many laboratories.

The Pharmacopoeia Board or Committee of Revision are responsible only for the preparation of the official standards. Whether or not the Pharmacopoeia and its supplements are purchased by retail pharmacists is, in some states, entirely optional. In other states where the state law requires the possession of these books, it is a matter for the responsible state officials to enforce.

Finances are reported to be in excellent condition, and the Board of Trustees has been able to meet the revision expenses of the decade, to increase greatly the research and conference programs, and still to hold its basic reserves intact.

In preparing the second supplement, every step will be taken to insure the carrying out of the requirements of the convention for the preparation of an official text. It is expected that the revised or new monographs will be submitted in the form of proof to members of the committee of revision and given wide publicity. Following their publication, a public hearing will be granted at which members of the executive committee responsible for revised texts will be in attendance. Following the public hearing a conference with the officials of the Food and Drug Administration and the Public Health Service will be held, after which the members of the committee of revision will be given an opportunity to see and

vote upon the finally approved text. When the supplement has been issued, ample time will be given before it becomes official.

AWARD OF THE WILLIAM H. NICHOLS MEDAL OF THE NEW YORK SECTION OF THE AMERICAN CHEMICAL SOCIETY

THE William H. Nichols Medal of the New York Section of the American Chemical Society has been awarded for 1939 to Dr. Joel Henry Hildebrand, professor of chemistry in the University of California.

Professor Hildebrand has pursued investigations in every field of general, physical and analytical chemistry, including such diverse questions as the vapor pressure of metal amalgams and the use of helium in preventing caisson disease, the "bends" of tunnel and caisson workers and of deep-sea divers. He was cited by the jury specifically for his study of the fundamental thermodynamic and kinetic properties of liquid and solid solutions, a field in which he is preeminent. The statement made by the jury reads:

Professor Hildebrand is internationally respected for his contributions over many years concerning the experimental properties and theoretical aspects of substances when in the liquid or molten state. This work includes the study of mixtures of such common solvents as water, alcohol, carbon tetrachloride, chloroform and the petroleum solvents with iodine, sulfur, naphthalene, anthracene and a hundred other solids; mixtures of the solid metals with the one common liquid metal, mercury, and mixtures of solid and molten salts, like ordinary table salt, salt-peter, silver chloride, etc., with each other.

He has succeeded in classifying these solutions, correlating their behavior, finding their peculiarities and deriving theoretical and mathematical relations concerning them so that their properties are known or may be predicted in a way previously impossible.

In recent years, Professor Hildebrand has devoted more and more attention to the exceedingly abstruse but nevertheless fundamental theoretical problem of the intermolecular forces in liquids and liquid mixtures. If the scientist knew the exact nature of the electrical, gravitational and chemical forces exerted by each ultimate particle of matter—the molecule—on its neighboring molecules, he would be in a position to declare positively how any pure liquid or any mixture would behave.

If molecules were small, hard balls, with only gravitational forces at work, their distribution in a solution would be as simple as that of a mixture of black and white marbles shaken together and poured into a vessel. But molecules are composed of positive electrically charged atomic nuclei and negative electrons, with empty space, penetrated only by these electrical forces, accounting for a large part of their volume. The forces acting between adjacent particles vary from the intense electrical attraction and repulsion of charge ions to the much smaller forces between symmetrical molecules whose electric charges are all neutralized within the structure of the