

EDITORIAL

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PHARMACOGNOSY AND THE PHARMACIST.

SINCE the days of Dioscorides and the old herbalists the science of pharmacognosy has steadily grown in scope until to-day it is generally recognized as comprising the investigation of the history, commerce, collection, cultivation, preservation, identification, selection and valuation of crude drugs and other substances of vegetable and animal origin.

Among the fields of knowledge aligned with pharmacy there is probably none which the pharmacist is more peculiarly fitted to cultivate than that of pharmacognosy. This could probably not be said a decade ago for the rank and file of American pharmacists, but with the introduction into our pharmaceutical curricula of more systematic courses in botany and chemistry and the gradual increase in preliminary educational requirements of our pharmaceutical institutions, it has now become possible for the teacher of pharmacognosy to erect a solid edifice upon a sufficient foundation. Certainly enough can now be imparted to and mastered by the average two-year pharmacy student to enable him to identify all of the official crude drugs and many of the indigenous medicinal and poisonous plants, and, with the aid of reference texts and papers, to distinguish past adulterants and substitutions as well as to identify powdered drugs and determine the purity of the powder.

With such a working knowledge, it should not be difficult for the graduate of the modern two-year pharmacy course to undertake some phase of research particularly along lines of drug morphology or history. It can be truly said that the pharmacist because of his training is really a practical pharmacognosist.

As Professor Greenish has pointed out in his recent address before the British Pharmaceutical Congress, "It is for the pharmacist (the practical pharmacognosist) to utilize the results arrived at by the scientific pharmacognosist and turn them to practical account."

The opportunities for specializing along different lines of pharmacognosy and becoming an expert in these are manifold.

For the pharmacists who desire to be equipped for work in food and drug analysis or inspection or for the growing of medicinal plants, there are now available in some of our pharmaceutical colleges courses in Technical Microscopy, Advanced Pharmacognosy and Drug Plant Cultivation.

For those desiring to prepare for the position of pharmacognosist in the federal service or for the teaching of pharmacognosy, the two-year course is entirely inadequate. The preparation for these tasks should embody, in addition to the necessary studies of the first two years, a knowledge of college English, German, French, Zoölogy, Vegetable Taxonomy, Advanced Chemistry, Pharmacodynamics, Mathematics, Physics, Technical Microscopy, Plant Physiology and Drug Plant Cultivation including Genetics. A course which includes all of these essentials leads to the degree of Bachelor of Science in Pharmacognosy.

It is obvious that such a course would naturally equip the student for undertaking scientific pharmacognosy, in which the problems awaiting solution are so numerous that the surface has merely been scratched. There are, for instance, methods of microanalysis to be perfected, problems in genetics pertaining to the cultivation of drug plants yielding a more uniform amount of active principles to be solved, not to mention the wealth of material to be investigated within the realms of plant chemistry and morphology.

The call at the present time is for more research by pharmacists. It will be this research by a wider group of pharmacists that will more and more elevate the opinion of the laity toward the pharmaceutical profession. Toward this end, pharmacists will find the field of pharmacognosy attractive and rich in problems of a tangible sort.

H. W. Y.

ABSTRACTS OF PROPOSED CHANGES WITH NEW STANDARDS AND DESCRIPTIONS FOR UNITED STATES PHARMACOPOEIA X.

IN no other country is the work of revising a Pharmacopœia given so much publicity as in the United States, where all who make use of such standard are given an opportunity to participate in its revision. The latter statement applies with equal force to the revision of the National Formulary.

In this issue of the JOURNAL, Part I of the "Abstracts," as stated in the above caption, is printed. This publicity is given in compliance with a recommendation by the United States Pharmacopœial Convention in 1920 "that the Committee of Revision make public for comment and criticism, an abstract of new descriptions and standards, and all important changes in preparations and standards, proposed for the new Pharmacopœia, before final adoption."

"Part I includes most of the organic chemicals and some of the inorganic chemicals. Abstracts will be issued from time to time covering other divisions of the Pharmacopœia.

"The nomenclature used in these abstracts does not necessarily represent that to be finally adopted.

"Where no reference is made to rubrics, formulas, directions, tests or chemical assays, it is understood that the material facts remain the same as in the United States Pharmacopœia, Ninth Revision."

The statements, in substance as above, are made in the report of this issue, and are here repeated so that the opportunity for comment will not be overlooked. From time to time lists of proposed additions and deletions have been printed, and through these sources of information, and the abstracts, pharmacists will be fully advised relative to the new standards.

E. G. E.

THE NATIONAL DRUG TRADE CONFERENCE.

THE significance of the Drug Trade Conference to the drug trade in general, and the public served, is becoming more manifest. There was much important work accomplished at the last session of this delegate body. Delegating more power to the president of the Conference is a move in the right direction—there are many propositions which have had favorable action by and on which all represented organizations are agreed upon, that may require immediate representation

in legislative bodies, or in conference with authorities, on the part of the drug trade; delay or indefiniteness weakens the cause.

The resolutions adopted not only evidence coördinated endeavor, but will impress those addressed with the sincerity of the purposes of the organizations. Some of the actions taken will add force to presentations made by associations represented in the Conference—the emphatic protest against forfeiture bonds may be cited and also the resolutions opposing the “as is” standard in some of the sales of medical supplies. Other resolutions are entitled to like endorsement, but the purpose of this comment is to give optimistic expression relative to the work of the Conference.

Coördinated effort is becoming a greater force and is an essential organization quality. The work of President S. C. Henry deserved the thanks voted him by the Conference; all the organizations will agree to that, cognizant also of the important services rendered by their delegates; doubtless, they are willing to serve, but at this season a word of appreciation seems timely. E. G. E.

BENZYL MANDELATE—A NOTE.

BY DANIEL BASE.*

It has been shown by Macht¹ that mandelic acid in certain salts and esters possesses distinct antispasmodic properties similar to those of benzyl benzoate and benzaldehyde. It was thought that the benzyl ester of mandelic acid might possess some interesting pharmacologic action and, accordingly, it was prepared for study.

Benzyl mandelate was obtained by the action of benzyl chloride on sodium mandelate: $C_6H_5CHOHCOONa + ClCH_2C_6H_5 = C_6H_5CHOHCOOCH_2C_6H_5 + NaCl$

It forms white, micaceous, glistening scales, melting at 93° C. (uncor.), which are nearly insoluble in cold water, readily soluble in alcohol, ether, chloroform and benzene. The pharmacological action of benzyl mandelate will be made known later.

PENNSYLVANIA PHYSICIANS PREPARE FOR LEGISLATION.

A letter has been issued to the medical profession defining the stand to be taken on legislative matters. They favor:—

“All legislation to be proposed by the State Department of Health calculated to improve the prevention and control of all disease; better hygienic and sanitary regulations regarding milk, water supply, foods, etc.

“Coördination of all boards relating to the healing art instead of having these very important functions scattered about, as now, in several boards and bureaus when they should function under one head. By this method all those having to do with the healing art can present their claims to the State Legislature with a solid front.”

They oppose:

“Any movement calculated to curtail the vivisection of animals for scientific research and study.

“Any bills preventing vaccination and the use of antitoxins and serums.

“Granting to any cults separate examining boards unless the educational qualifications are of a minimum equal to those already existing.

“Any legislation providing for compulsory state health insurance or subsidized state medicine.”

Other legislative items of interest to pharmacists will be found in the report of the transactions of the National Drug Trade Conference under Societies and Colleges of this issue of the JOURNAL.

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¹ Macht, JOUR. A. PH. A., 11, 897, 1922.