EDITORIAL

E. G. EBERLE, Editor 253 Bourse Bldg., PHILADELPHIA

THE INDIANAPOLIS MEETING.

THE results of the Sixty-Fifth Annual Meeting of the American Pharmaceutical Association will mark an epoch in the history of pharmacy, and the drug business in general, if the wise plans and suggestions of President Frederick J. Wulling are carried into effect. Those who have contended that the American Pharmaceutical Association lacks in the progressive spirit and initiative must now disabuse their minds of such thoughts and be convinced that it is up to them coöperatively to take advantage of the great opportunity so well outlined in the address of the President of the American Pharmaceutical Association.

There should be no contention over the credit for the proposed federation of pharmaceutical organizations—"there is glory enough for all." The thing is to bring about the consummation by appointing efficient committees, without unnecessary postponement, constituted by members who are qualified for the important task. We have examples of other organizations for the undertaking, differing perhaps in many respects, because of different activities and on account of the complexity of the drug business, but certainly similar in the coöperative plans outlined of working and counseling together. Feasible, yes, easily so; if the pharmacists—retail, wholesale, manufacturing, etc.—really desire to further the project instead of withholding their support for one reason or another, there must be confidence, there must be genuine coöperation.

The sum of money spoken of and required for proper and efficient evolution of the proposal seems large, but everything is relative; the individual with most moderate income can surely devise means for saving the small amount of the indicated assessment during a year, if not, then in two years, when it must be evident that the successful culmination will benefit him, not only in carrying into effect measures that are now impossible because of insufficient support and will continue to come up as in the past. But perhaps there is not so much uncertainty with the smaller contributions as the larger, can we not hope that for one time, this time, all are going to work together for the one great object, and show that pharmacists are capable of big things, that the branches of the drug trade and profession have herein a common cause. The evidence of the possibility is in the successful work accomplished by the Drug Trade Conference.

The central theme of the address, which is printed in this issue, is the need of federation of all pharmaceutical organizations. It should be given careful study by every pharmacist; the scheme is both practical and practicable.

Without dwelling further upon the address which will doubtless prove of valuable interest to the reader, and going into a discussion of recommendations

that also formed part of other presentations, brief references are made to further proceedings of the convention. The recognition of the pharmacist and pharmacy by the Government had an important place not only in President Wulling's address but in some of the papers of nearly all Sections; also in the Transactions of the American Conference of Pharmaceutical Faculties and the National Association of Boards of Pharmacy. "Glory enough for all" was emphasized in a meeting of representatives of the National Association of Retail Druggists and of the American Pharmaceutical Association. The consensus of opinion was that pharmacists should not only be given recognition by the establishment of a pharmaceutical corps in the U. S. Army, but that representation should be had on the Council of National Defense. The thing is not how much credit should be accorded to one body or another, but how much can all, working together, do for humanity, for pharmacy; that is the thought; no one cares now about the political affiliation of our President—we are all fellow-citizens; his cause is ours; so also, all of us are pharmacists; the accomplishments, the results count, and our purposes will only secure applaud if we win. Let us do it!

Higher standards for pharmacy was the keynote in both the American Conference of Pharmaceutical Faculties and the National Association of Boards of Pharmacy. Graduation from a 4-year high school course was made a requirement for entrance to colleges of pharmacy from 1923. Further comment on these meetings must be deferred to a later issue of the JOURNAL; the address of President R. A. Lyman included an analysis of the status of pharmacy and a forceful presentation of the need of advancing its professional standard. The meetings were well attended, continuously active during the hours assigned by the program, and the entertainments were interesting and enjoyed by all. A feature of the latter was the play, "A Tale of Two Drug Stores," by local pharmaceutical talent and staged under the direction of Mr. Harry Porter, at the German House. The first Act, designated "Dose," presented the old apothecary shop, and the next, a "modern" drug store, then, as a third number, followed refreshments.

The accommodations furnished for holding the sessions were good and afforded the opportunity of transacting business without loss of time. Mention should be made that the value of a number of addresses and papers was enhanced by the projectoscopes that were supplied and ready for the illustrations and demonstrations. In that connection it may also be said that a number of these illustrated lectures emphasized the commercial value of professional pharmacy.

A gratifying act that will doubtless prove of great value to pharmacy, and we may say to medicine and even more extensive, was the initiation of a fund for pharmaceutical research, known as the American Pharmaceutical Association Research Fund, by the Association. The nucleus is created from the estimated net profits derived from the National Formulary, and now amounts to $7,000.00.

This will be added to as profits from that source become available. So it will be discerned that pharmacy will receive further benefits from the National Formulary; it is another evidence of the altruism of the Association, and it is to be hoped that persons, firms and corporations, actuated by the same spirit, will contribute liberally to this fund, so as to bring the amount up to that contemplated, namely, $100,000. Pharmaceutical research should be promoted by the American Pharmaceutical Association and the move is timely, commendable and important.

The historical exhibit attracted considerable attention and proved that this can be made an interesting feature of every convention.

The Sixty-fifth Annual Meeting of the American Pharmaceutical Association was a successful one. E. G. E.

THE VALUE OF CLINICAL EVIDENCE.

THE therapeutic value of a new substance may be judged from a knowledge of its composition and its chemical and physical properties, from a study of its effects on healthy or diseased animals, and by trying it on the sick.

Were magnesium salicylate a new drug, its action might be predicted from the known action of the salicylic radical, the magnesium ion, and the solubility and ionization constant of the salt. Often this plan fails entirely, and a new compound is found to have therapeutic properties not anticipated by a knowledge of its constitution and properties.

Ordinarily a very good estimate of the therapeutic action of a new compound may be made by studying its effects on animals. Many instances are known, however, in which a drug has an action on man which is quite different from that on animals, particularly if these differ widely from man in their structure and organization. Furthermore, the action of a drug on a healthy animal may be different from that on a diseased animal, and it may be that animals are not subject to the particular disease which the drug is supposed to influence.

The only certain method, and the one always employed in the end, is to test the value of a drug on the human organism affected with the ailment which the drug is supposed to combat. An almost fatal objection to the establishment of the therapeutic value of a drug by means of this "clinical trial" method is that it is impossible to tell what would have happened had the drug not been given to the patient. In other words, when a patient recovers after the administration of a drug, we do not know whether or not the drug had anything to do with the recovery—probably the patient would have recovered without it.

At the recent meeting of the American Medical Association, Torald Sollmann, M.D., professor of pharmacology at Western Reserve University, forcibly illustrated the many pitfalls which beset the establishment of the therapeutic virtues

of a drug by the "clinical" method (*Jour. Am. Med. Association*, July 21, 1917, p. 198).

Dr. Sollman thus refers to the clinical evidence which promoters of new remedies submit to the Council on Pharmacy and Chemistry (of which he is a member):

"When the Council demands evidence of the usefulness of a remedy, the manufacturers generally respond with every sign of enthusiasm. They may have ready a series of articles already published, or they instruct their agents to bring in letters from physicians. The last method seems to meet the most cordial response, judging from the deluge of letters and opinions that floods the Council. The quality of the published papers is a fair reflection of the deficiencies of what is still the common type of clinical evidence. A little thought suffices to show that the greater part cannot be taken as serious evidence at all. Some of the data are merely impressions—usually the latest impressions of an impressionable enthusiast."

The author outlines two procedures whereby a proper allowance of the natural course of the disease may be made: the "statistical" method and the "blind" test.

In the statistical method one set of patients receives the medicine under trial, while another set, otherwise managed in the same way, does not receive the medicine. This method is of value only when a large number of similar cases are available, and even then it cannot take into account the individuality of each patient.

In the "blind" test the physician attempts to distinguish unknown preparations by their effects. One series of patients is given the preparation under examination, while another series receives a preparation which is inactive or one with which the new remedy is to be compared, but in such a way that the physician does not know which patients receive the drug under trial and which the inactive one or the one used for comparison. The identity of the preparation is disclosed to him only after he has recorded his findings for each patient. This method is the only one which avoids the pitfalls of clinical observation and makes the results independent of the bias of the observer and the patient.

It is opportune to recall at this time that when the "blind" test was used, the effects of a proprietary solution of mercuric iodide in oil could not be distinguished from one made after the formula of H. A. B. Dunning (PROCEEDINGS A. PH. A., 1910, p. 1123) despite the claims of superiority which were made for the former. Similar results have been obtained when the "blind" test was applied with synthetics, proving in certain instances that may be cited, that they are therapeutically as active and efficient as the higher priced natural products which they may displace, with the sanction of the attending physician, without any disadvantage whatever, should there be a marked difference in price, or for any other reason. A realization of the unreliability of many of the clinical trials serves to

make it clear why so many new proprietaries have enjoyed so short a period of favor, despite the remarkable "cures" which are at first reported for them.

This is a subject of importance, not only now, but in the promotion of a more useful materia medica, more serviceable for the American practitioner. Such a test removes prejudice and should develop rational therapeutics, the science of medicine and of pharmacy, free the practice of medicine and of pharmacy from undesirable exploitation. E. G. E.

THE SHORTAGE ON SYNTHETIC DRUGS.

TO facilitate the manufacture of synthetic drugs in this country and thus to relieve the shortage which has resulted from the war, the National Research Council has established a committee on synthetic drugs.

Professor Julius Stieglitz, head of the Department of Chemistry of the University of Chicago, has accepted the chairmanship of this committee. As his associates, Professor Stieglitz has selected Professor M. Gomberg, of the University of Michigan, Dr. Roger Adams, of the University of Illinois, and Dr. W. A. Puckner, Secretary of the Council of Pharmacy and Chemistry.

A bill before Congress—the Adamson Bill—will make provisions for licensing manufacturers to prepare drugs now protected by patents controlled by enemy countries. The administration of the provisions of the bill will be in charge of the Federal Trade Commission and the new committee of the National Research Council is being organized with the special object of being prepared to put at the disposal of this Commission such scientific coöperation as the Commission may desire to ask for. To this end, the efforts of the committee will extend in two main directions. In the first place, to assemble reliable information as to which synthetic drugs are really hard to obtain or, if obtainable, are sold at an exorbitant price. In the second place, to organize research work, especially in universities, in part to assist manufacturers in working out the problems of the production, on a large scale, of synthetic drugs of a high degree of purity without great delay and, in part, to have preparations such as reagents which would not attract manufacturers, made in university laboratories, if necessary under licenses as is now being done in England.

In order that the committee may concern itself with those synthetic drugs, the manufacture of which is most urgent, it is requested that pharmacists send to W. A. Puckner, 535 North Dearborn Street, Chicago, a list of those important synthetics which they have found it impossible or difficult to obtain, or for which an exorbitant price is charged.

Manufacturers interested in the production of a given product are invited to communicate with J. Stieglitz, University of Chicago, Chicago.

E. G. E.