

ing whatever appears to have been done toward making the *adoption* effective or of the least value to the Association.

It is not an unusual procedure for organizations such as the American Pharmaceutical Association to have an advisory body similar to that proposed as the Advisory Council of the A. Ph. A., and such a plan has been found to be of great value to industrial managements. What business organization would think of adopting a plan by which it would annually appoint a specialist to give careful study to the particular problems of its industry, at the end of that short period listen *attentively* to his report and suggestions for betterment and progress, and then after approving the recommendations cast them into the discard?

It is the principle of ACTION that assures the success of any enterprise, whether applied to the activities of an industry or of an association. What the Association has lost in the way of progress by thus neglecting to utilize the valuable assets available, namely, the special knowledge of the needs of the Association, the realization of the possibilities of its service, the clearer insight into its affairs and the love of the Association and desire to advance its standing, can not now be measured. It certainly has not been to the best interests of pharmacy that our retiring Presidents have been shelved with such scant consideration of their labors and their concern for the welfare and progress of the Association.

It is believed that the present is an opportune time to revive this project, and that no further time should be lost in crystallizing into action the expressed will of the Association, which has a firmer foundation in its practicability and usefulness than merely in the sentiment associated therewith. G. M. B.

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### THE PROPOSED RESEARCH INSTITUTE.\*

BY H. V. ARNY.

That the proposition of Dr. C. H. Herty regarding the establishment of an institute for research in the chemistry and pharmacology of medicinal substances is attractive goes without saying; that the creation of such an institute is desirable is equally true. These basic principles being accepted, the remaining questions are largely matters of detail, such as scope, ideals and management. Up to now the proposition has been so vaguely outlined that much discussion and considerable difference of opinion have obtained and until some definite plans are evolved this confusion will continue.

#### SCOPE.

The original proposition seemed limited to the synthesis and manufacture of organic chemicals and pharmacological investigations as to their possible medicinal effect. From this simple start, the discussion has extended to the widest ranges of drug study. Certain representatives of drug manufacturers have seemed to assume that the main function of the institute would be to pass on pharmaceu-

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tical products and to give such official approval not merely of the institute, but indirectly of the American Chemical Society itself. Others have suggested lines of phyto-chemical research; others have urged work on pharmacopoeial revision. A definite statement of scope is highly desirable for there are in many of the suggested fields of endeavor pitfalls that might lead our great Society into extremely embarrassing situations. There is a particular danger in the original idea of synthesizing new remedies and then setting upon them the seal of approval of the institute and of its official backers. Those of us who are familiar with pharmacy know full well the remarkable propaganda conducted in this country from the early nineties until 1914 by Germans in behalf of the medicinal products of their chemical laboratories. I, myself, an alumnus of a German university, had my first revelation of Hunnish activity in the methods pursued in conducting the propaganda in question. Medical America would be told that the latest product of the tar barrel—let us call it "Nirvana"—was the only simon-pure hypnotic absolutely devoid of habit-forming qualities and this fact would be attested to by Herr Geheimrath Doktor This and by Herr Professor Doktor That, until the recommendation of a German medical man for any German product produced incredulity among those in America who knew, until the statements were confirmed by American medical authorities. Let those who are planning the institute beware lest similar commercial influences creep in and ruin the fair edifice about to be erected.

#### IDEALS.

The foregoing paragraph naturally leads to the thought that a prompt enunciation of the ideals of the proposed institute is imperative. While not positively stated, it is assumed that a considerable amount of the proposed fund is expected to come from the pharmaceutical manufacturers of this country and the writer has positive knowledge that the interest manifested in the institute by certain manufacturers is not entirely altruistic. As was well pointed out by Dr. Weidlein, of the Mellon Institute, at the meeting held in New York on November 8, 1918, any research institute founded upon the principle that donors to its endowment will secure commercial advantages out of their philanthropy is from the start destined to failure. Of vital importance is it that from the beginning of the campaign for funds for such an institute, the altruistic nature of the services of the institute be emphasized in order to impress upon prospective donors the fact that no *quid pro quo* need be expected.

#### MANAGEMENT.

A widely expressed criticism of the plans for the institute so far offered is the fact that while medicine is frequently spoken of in connection with the institute it is evidently the intention of its proposers to make it primarily a creature of the American Chemical Society. A greater blunder than this can hardly be imagined. It seemed singular to many that no mention was made at the meeting of November 8 of the remarkable work done by the Council on Pharmacy and Chemistry of the American Medical Association. The writer holds no brief for that body and in fact has objected emphatically to certain of its findings which he has considered arbitrary, but the fact still remains that no one factor has done more during the past fifteen years to purify *materia medica* than the A. M. A.

and its Council on Pharmacy and Chemistry. It may be that it is too much feared for the enemies that it has made to be acceptable to those planning the institute, but if this is so, it is patent that at least the more highly specialized medical organizations such as the Society of Pharmacology and Experimental Therapeutics or the American Therapeutic Society should be invited to participate in the organization of the institution. Another blunder is the apparent omission, by the proposers, of the American Pharmaceutical Association as a factor in organizing the institute. I am well aware that among certain chemists pharmacy is considered merely as the keeping of retail drug stores, but it is at least inconsistent to expect to interest drug manufacturers in a project from which their mother organization is excluded. When the present leaders of the American Chemical Society were infants in arms, the American Pharmaceutical Association was a lusty organization. Age, and merely age, may mean dotage, but in the case of the A. Ph. A., now in the sixty-seventh year of its existence, it numbers almost three thousand men and women including all of us who not only preach but also practice professional pharmacy. If challenged to show the professional side of pharmacy, we need only refer the critic to the fifty-nine volumes of Proceedings of the A. Ph. A. (1852-1910) and to the volumes of its JOURNAL since 1911. In these are found the results of the researches of Procter, the Father of American Pharmacy; Squibb and Diehl whose work on drug extraction placed them among the pioneers in the field of capillarity; John Uri Lloyd, whose work on capillarity and adsorption is known to all of us; Power, the greatness of whose work on phytochemistry is scarcely appreciated; Schlotterbeck, the investigator of papaveraceous alkaloids; Kremers, the painstaking delver in the field of terpene chemistry; Maisch, the winner of the Hanbury medal; Rusby, the botanical explorer; Kraemer, the pharmacognosist; to say nothing of scores of others fully deserving a place in the pharmaceutical Hall of Fame. American pharmacy always has had and always will have a group of investigators the peers of any other department of knowledge and the rallying point of this group is the American Pharmaceutical Association.

#### FINAL SUGGESTIONS.

Up to this point, this paper may appear critical rather than constructive. It is critical as to the vagueness of the proposals made thus far by those behind the movement. May the present writer be permitted to make a few suggestions, attempting at the same time to point out how more enthusiasm may be aroused in the institute plan? In making the suggestions, I am speaking solely as an individual member of the American Chemical Society. As chairman of the Research Committee of the American Pharmaceutical Association I must be extremely careful to avoid any impression that either the research committee or the parent association approve or know of the crudely outlined plan I am about to propose.

To make the institute a real success, the money raised must be given without any conditions whatsoever beyond the bare statement that the institute is to be conducted in the interest of research in medicinal substances and that under a competent directorate.

Its work should be conducted under the joint auspices of the American Chemical Society, the American Pharmaceutical Association, and such national med-

ical associations as may hereafter be decided upon. From its inception, the work of the institute should be divided into at least four departments, each with a departmental head of equal power and voice; the four departments being (a) chemistry, (b) pharmacy, (c) pharmacology, (d) practical therapeutics; over these four responsible officials there being a director, whose duties shall be largely executive.

Of course, as the institute grows, other departments may be necessary, but from the beginning the four enumerated above are essential, if the institute is to do work worthy of its proposers.

This summary of my thoughts is presented for discussion this evening, with the full appreciation that the suggestions offered are fragmentary. But there is at least something tangible in them, no matter how you may chance to view them; which is more than can be said of most of the discussion of the institute up to the present time.

### LOCAL ANESTHETICS—NITRIC ACID COLOR TEST.\*

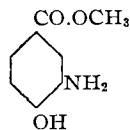
BY TORALD SOLLMANN.

This investigation started with the observation that an American sample of procaine gave a deep rose color with nitric acid. Further comparisons showed that this was due to a rare impurity, all other samples of procaine being only very slightly colored. The nitric acid test therefore appears to be a rapid method of assuring the absence of this unknown impurity. Although the pharmacology of this impurity is not known, official requirements should be framed so as to exclude it.

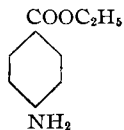
The nitric test was then applied to other local anesthetics. With the exception of orthoform-new, these remained colorless, even on drying. Orthoform-new gave a well-defined color reaction, and can therefore be easily differentiated from all the other local anesthetics. The test is positive even when applied directly to very complex mixtures, f. i., to orthoform lozenges.

A glance at the structural formula of orthoform, which gives the test, and the related anesthetics that do not give it, indicates that its reaction depends either on the introduction of the OH group, or on the different position of the NH<sub>2</sub> group—presumably the former.

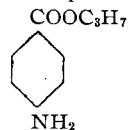
Orthoform-new.



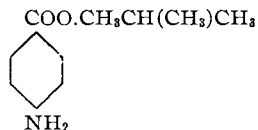
Anesthesin.



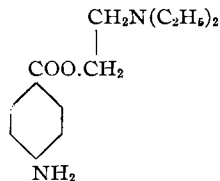
Propaesin.



Cycloform.



Procaine.



\* From the Department of Pharmacology of the Medical School of Western Reserve University, Cleveland.