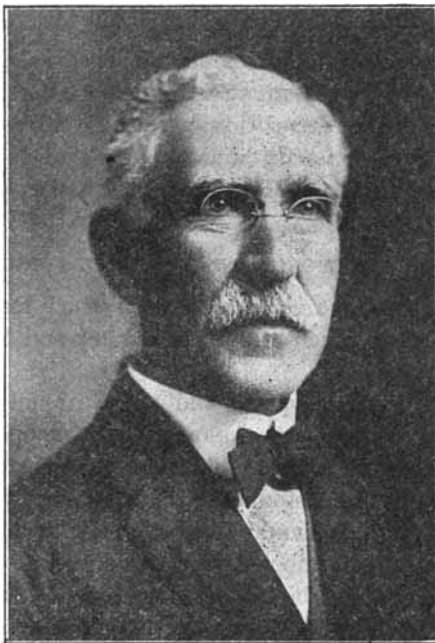


PRESIDENTIAL ADDRESS OF L. E. SAYRE, PRESIDENT OF THE AMERICAN PHARMACEUTICAL ASSOCIATION, 1919-1920.

*Fellow Members of the American Pharmaceutical Association, Ladies and Gentlemen, Friends of the Association:*

It is fitting that I should, at the opening of this Convention, make recognition of and express, as your spokesman, our appreciation of the privilege we have in assembling in this famous central city of our great Nation. Although we have here convened as members of a special vocation and profession, we are not unmindful of our intimate relation to this Mecca of our American Commonwealth. As American citizens the passion is irresistible to pay tribute to this center as the emblem of our Nation's unity of purpose, where our interests have been focused especially in recent

years. It seems fitting that we should in this place proudly recall the magnificent achievements accomplished for humanity during the trying days of a mighty world conflict—though it cost a soul-wrecking conflict, a conflict which was one of compulsion, seemingly laid upon humanity by some unseen maniacal hand; a conflict which calls to mind the bravery and sacrifice of our young men who now really live in a higher sense



L. E. SAYRE

than we who remain to bow our heads in grief and in humble recognition of their service. It is fitting that we, in recognition of this patriotic sacrifice and at this seat of our national administration—this center which is a part of us all and in which we have a feeling of joint ownership—express that which loyalty instinctively calls upon us to do, a re-dedication of our patriotism.

It is also fitting that I should recognize the importance and significance of

the coming convention for the revision of the United States Pharmacopoeia, which, with us, will celebrate its Centenary. As our minds shall unconsciously be drawn to the history of the past we shall doubtless recall in grateful remembrance those Nestors of American Pharmacy now passed away, whom we hold in sacred memory; those, who with lofty aim have contributed toward the progress to which we now proudly lay claim. This progress, measured by the interval of a century, seems less than it should be, it is true, but as we review this interval in retrospect we realize that it has been made in spite of much error, opposition and stumbling in the dark. We have, however, in a great measure profited by these; they have helped to clear our vision; in spite of them our ideals, toward which we strive, are none the less intact and they still stimulate us to further persistent activity.

## WAR VETERANS.

The World War has come to a close and, as our Association looks back over the achievements of its members, it cannot refrain from a thrill of enthusiasm and thankfulness for the splendid service of our young men. It is no idle thing to say that Pharmacy has played its part nobly and well in the terrible struggle which was waged for humanity. The World War Veterans' Section of the Association, created at the last convention, has been earnestly at work during the past year to express in some manner to those who entered the service the appreciation which every pharmacist feels and the recognition which is due them. It is with much pride and pleasure that we extend to these men, who have come back, complimentary membership. I am sure that the members of the Association appreciate the excellent work of the special committee, the coöperation of the state associations, and also heartily approve the necessary expenditure in financing the project to bring about the affiliation of our returned soldier and sailor pharmacists. The report of this War Veterans Section will be one in which we shall take an interest. In behalf of the Association, permit me to extend a hearty welcome to membership to those of our army and navy pharmacists who have accepted our invitation to join our ranks. (More than 2100 names have been added to the roll of membership.)

## THE PHARMACOPOEIA AND NATIONAL FORMULARY.

I have referred to the Centenary celebration which looms large in our vision and which promises to mean much to both Pharmacy and Medicine—the Revision of the Pharmacopoeia.

The United States Pharmacopoeia and the National Formulary are official volumes to the revision of which our Association, in coöperation with Medicine, looks forward at this time with considerable thought and interest. The pharmacist has always felt that he was the custodian of remedial agents and with the physician helped to determine that which should be worthy of official recognition. And it is a deplorable fact that quite a number of the state associations are not incorporated and that their delegates cannot be admitted to the Revision Convention. State associations should see to it that they are properly qualified to be represented at these Pharmacopoeial conventions and thus occupy the position they really owe to Pharmacy.

As long as Medicine is both a science and an art, and so long as clinical therapeutics is able to produce results by the use of remedial agents whose worth cannot be demonstrated by the pharmacodynamic experiment, we will be forced to admit drugs and preparations of both classes. To do otherwise would be tantamount to destroying the work of centuries of experience and dogmatically asserting the value of scientific method which has not yet been able fully to prove itself. No one will claim that the present scope and content of the U. S. P. is perfect and beyond reproach. A certain amount of judicious "pruning" must be done with each successive revision. Even the ardent conservatists do not believe in keeping worthless material in an official volume. They do, however, most emphatically insist that until there is proof positive, not alone by the methods of experimental pharmacology, but also by the bedside experience, that a drug is worthless, that it be recognized and standardized as are those of more evident potency.

If we should agree to limit as useful drugs and preparations those only that give visible results in the pharmacological laboratory, and recognize for standardization only these, I am convinced we should be guilty of unfair treatment to the art of medical practice.

Until Medicine and Pharmacy shall become more exact sciences than they are to-day, there will always be plenty of room for a difference of opinion as to what is valuable and what is not among the remedial agents which are now recognized; what is worthy of recognition in the United States Pharmacopoeia and National Formulary and what shall be excluded as unworthy of such recognition from these volumes. The policy of admission into these national publications has been very largely based upon what is generally accepted as remedial in character by the medical profession as a whole; not by the few, but the many, who find occasion for their use. What is thus regarded as useful by the many, it is believed, should be standardized as far as pharmaceutical and medical science may accomplish this end. It is interesting to note here how doctors disagree as to what is and what is not useful. A prominent physician made to me the significant remark: "As long as clinical data and laboratory findings are at such variance it is unwise to be opinionated on the point of drug values." It should always be borne in mind that U. S. P. and N. F. recognition does not carry with it a favorable recommendation. The U. S. P. and N. F. are not to be considered as treatises on therapeutics, but that they have the same relation to Medicine as the United States publications containing certain standards for foods have to the public. What the public uses as foods is included in the U. S. standard for them. It must be admitted that a certain kind of prestige is given to a remedial agent when it is admitted into either the U. S. P. or N. F., but if one mistakes this kind of prestige for a recommendation the fault lies with one's power of discrimination. We may incidentally remark in this connection that the teaching of experimental pharmacology in our schools of pharmacy will do much to make future pharmacists valuable contributors to the work of Pharmacopoeial revision. While, as has been said, the Pharmacopoeia is not a treatise on therapeutics nor, to my mind, should ever become one, yet a knowledge of the pharmacodynamic action of drugs will always be valuable information and will play an important part in determining the question of deletion or inclusion of any specific agent. Students in pharmacy of this generation should be able to comprehend the results of pharmacological research and be familiar with clinical findings so largely contributed by medical science.

We cannot emphasize too strongly the complementary character of Pharmacy and Medicine in modern life; the fact that the two professions, separate in one way yet united in others, must together help in solving the large problem of public health and disease. An adequate Pharmacy, to my mind, probably now visionary, comprehends a training of nothing less than pharmaceutical education complemented and rounded by large medical knowledge and information. We have within our ranks such men and we need more of them. The inclusion of the so-called laboratory medical sciences into the pharmaceutical curriculum will in the future do much to make the pharmacist and the doctor meet on equal planes and, through this, enjoy mutual respect.

Any one acquainted with the history of Medicine and Pharmacy knows that

the publications referred to have, in a great measure, kept pace with the progress of pharmaceutical and medical science, building up from very crude and unrefined material, more accurate agents through their refinement. One familiar with the history of this progress thus accomplished, as it has been, in spite of imperfect organization and coördination, must admit that these works make a remarkable showing. Looking to the future, when it is to be hoped a better organization and better coöperation will obtain, we shall make, accordingly, a greater degree of progress. The U. S. P., which this year celebrates its Centenary, stands as a monument to the combined work of physicians and pharmacists. It has the reputation of leading the pharmacopoeias of the other nations of the world. Its shortcomings have been very much discussed and undoubtedly no book of this character can ever be above criticism, and yet the fact remains that as a standard it furnishes the pharmacist, the physician and the public with an official safeguard whose value is not to be over-estimated. The Pharmacopoeia has behind it to-day 100 years of history. During this time it has served the public with a single interest. Its thought and content have ever been free from commercial taint and propaganda. So long as the Pharmacopoeial Convention can attain to this ideal we need have no fear of the future successful development of this national pharmaco-medical standard. The volume is the combined work of two great professions and this it should ever remain.

Much has been said of the shortcomings of the National Formulary. Permit me to say at the outset that I consider the N. F. a typical work for the pharmacist; his own and special property, and not a joint work as is the Pharmacopoeia. The committee in charge of this revision will undoubtedly profit by criticisms aimed at its improvement. There can be no gain in combating the representative pharmacists who devote their time to advance the value of this work or in fact of any official or quasi-official standard. Opposition to such standards has its root in a large measure in a clamor for commercial license to claim proprietorship—for freedom of action in exploiting remedial agents of possible proprietary character. It should be said that this is no reflection upon our representative manufacturing pharmacists for they belong to our ranks and are connected intimately and indirectly with the revision and welfare of these works and are above any motive save that of serving their profession and the public.

As before stated, we should have our students familiar with therapeutics and experimental pharmacology. These subjects should be taught in all our schools of pharmacy. We should have students of this generation able to comprehend the results of pharmacological research, with the action of remedial agents, and familiar with the clinical findings, so largely contributed by medical science. The time is now at hand when this step should be taken if pharmacists are to meet the growing demands of the profession and coöperate and contribute wisely to these publications.

As to the details of the work of revision, it might be helpful if this Association would express itself at this Convention as to the method. It has been suggested by one of our ex-presidents, whose opinion I regard very highly, that this could be accomplished better than it has been done by a more modern method; namely, by a small committee with full-paid experts rather than by voluntary contributors, who seldom achieve the best results in such activity. If full-

paid experts were employed it is claimed the cost of revision would be materially reduced. This latter consideration is not so material perhaps as the former, a method which will give the best possible results. There is much to be said in favor of this suggestion in the matter of detail, and likewise good arguments may be given for continuing the old well-tried method. I shall not presume to speak for the Association as to the superiority of either method of revision. I shall only suggest that at this annual meeting the Association should offer a contribution by arriving at a decision embodied in a resolution setting forth its attitude toward the important question as to the best method that should be adopted for the revision of the U. S. P. IX.

#### PROHIBITION.

Pharmacists, and revisers of our national standards for drugs, have been brought face to face with problems connected with the administration of the prohibition law. This law, aside from its strictly moral phase, is an expression of the decent element of society irrespective of party against intemperance and the saloon. One of our English writers has said that, speaking from a European point of view, one of the curious things about the adoption of prohibition in the United States, extremely characteristic of the American temperament, is the good-natured way in which it was accepted. Men who were not prohibitionists, many who had drunk all their lives and believed that liquor was necessary for their well-being, have made willing sacrifice. Whether this critic understands the American psychology or not, the liquor interests are practically out of business. This is a condition, not a theory, the public faces, whether good-naturedly or not. As to the pharmacists, they have as a class been advocates of prohibition, and they very naturally resent, after being recognized by the Government as legal custodians of medicinal alcoholic liquids (including medicinal liquors), being classified as *retail liquor dealers*. It is worthy to note in passing that the Volstead Act is a distinct recognition of the pharmacist as a proper dispenser of medicine and that the dispensing of alcoholic liquors can be controlled through the profession of Pharmacy. Since the Volstead Act recognizes the sale of distilled spirits and wines for medicinal purposes and other prescribed non-beverages and places upon the pharmacist alone the responsibility of dispensing them for medicinal use, the contention may fairly be held that, the sale of intoxicating liquors for beverage purposes being no longer lawful, to license a pharmacist as a liquor dealer as now prescribed by statute makes him appear to be a violator of the purpose and intent of the prohibitory law; this is unjust. If the Government wishes to recognize as a public need the sale of spirits and wines for medicinal purposes and places this task (and it will be a task) on the pharmacist, it should not begin by prejudicing the public against the pharmacist by designating him as a vender of the very articles, the sale of which the country has specifically chosen to prohibit.

Council letters presenting the situation indicate that a protest should be made—one that will doubtless meet the hearty approval of this Association and one that will result probably in the elimination of the objectionable title. We are told that an Act of Congress would be necessary to change the classification. Doubtless our Congressmen will appreciate the fairness and justness of this protest and it is to be hoped that our Association, at this time, will provide proper

measures, through the Council, to bring about a relief to pharmacists from the odium which this unfortunate classification brings. By headlines and articles, by what should be considered as unwarranted reflections upon the profession, sensation mongers, in exploiting their trade, are doing much to make this odium more difficult for the professional pharmacist to bear. It may be said, in this connection, that one of the prominent members of the Council believes that the pharmacist should be entirely relieved of dispensing of liquor and the Government should be asked to assume the sole responsibility of dispensing it. It is the opinion of your president that the dispensing of medicines is a duty properly belonging to the pharmacist. So long as those liquors, the sale of which has been prohibited except as medicine, are regarded as remedial agents, it would certainly be an evasion of responsibility to decline to perform this service of dispensing. If any pharmacist degrades himself and his calling by illegally dispensing these medicinal agents, he should be held responsible and prosecuted the same as if he wilfully violated the narcotic law.

As unpleasant and unfortunate as it may appear, should we not be true now to the duty placed upon us, and in the meantime may we not, by constant and persistent research, reduce the use of liquors in every way feasible and endeavor to find a proper and adequate non-habit producing substitute for them? Here is a field of investigation worthy of the coöperation of the pharmaceutical and medical professions.

#### JOURNAL.

One of the most serviceable publications and exceedingly helpful agencies of our Association is our JOURNAL. Whatever is done to strengthen it can in like measure be said to strengthen the organization it seeks to represent. Considerable criticism, on the whole constructive and friendly in spirit, has lately been leveled at its present scope and content. It is urged, among other things, that it has not the personal touch necessary to reach the rank and file of retail pharmacists.

It will be remembered that at the last annual meeting a special committee, to act in conjunction with the Committee on Publication, as a joint committee, was directed to be appointed by myself, to consider the suggestion proposed in reference to the JOURNAL, with power to act. The committee was appointed, and the improvements proposed, many believe, will make the JOURNAL more generally useful and attractive and result in increasing our numbers and in strengthening our permanent membership. Our Association is, in a sense, a profit-sharing institution. Our workers have an equal share in the profits and dividends, let these be stated in whatever terms we please. They cannot be stated, it is true, in any commercial terms and not wholly in intellectual, but, whatever form the dividends, we share in earning them and in appropriating them. We contribute just about enough for running expenses. We have contributed little or nothing to the original capital invested, but our responsibility, as equal partners, in the corporation is apparent; each one should be eager to pass his ideas to any department for its improvement.

Some of our members wish to have more money put into the concern; others to do better with what we have; still others to do both—put in more for running expenses and do better with the increased revenue that would result.

Any institution, whatever its form, must have leaders and managers of departments in whom it can place confidence, if the concern yields a maximum of possible earnings. These leaders, moreover, have open minds for possibilities of improvement and reform, but it stands to reason that every project of reform cannot be designated as an improvement. It is interesting to note here that the different projects offered for improvement of the JOURNAL are conflicting. One proposes the opposite of another—one absolutely cancels the other. One singles out for improvement merely a re-arrangement of the printed matter. Others, centering upon the subject matter, hold opposite and conflicting views.

It seems to your president that any method for improvement should not tend toward a lowering of the standard of the JOURNAL; toward a standard that characterizes a typical popular journal. The question is too lengthy for a detailed discussion in this address but emphasis upon the importance of such a discussion cannot be over-stated. One word may not be amiss. The *Journal of the American Medical Association* may very profitably be a good standard in this connection.

If the desire for the popularization of the JOURNAL is to be satisfied, I sincerely hope that the present high standard of excellence shall be maintained. One of our great statesmen has advised: "Avoid popularity, it has its many snares and no real benefits."

It is to be hoped that the whole question of improvement of our publications in connection with the matter of financing the same will occupy the serious attention of the Council and that a satisfactory solution of the problem will be arrived at.

#### RESEARCH.

Our Association, for several years past, has been trying to solve the problem of properly establishing within itself a sub-division which will stimulate and encourage research. Many valuable contributions have been made by our members deeply interested in its promotion. The executive committee has, during the year, adopted resolutions toward this end which will, perhaps, be offered to the Council for its adoption at this session. The committee now fostering this work should receive every possible help and encouragement. The Council will present to this body, perhaps, the result of its deliberations upon this important subject, and anything I may say concerning it would be anticipating what that body has to offer, but it may not be out of place in this connection to refer to the value of proper organization for this work.

May I be permitted to say that there appears, in connection with this subject, a very pressing need of study and investigation that should command our immediate attention. There are those now in our profession who, if they were not already over-worked in the daily routine of teaching and administration, and if relieved of a part of this routine, could give their time for either directing or performing research work. Such as are adequately equipped and competent should be sought out and proper means and influence brought to bear to enable them to contribute to the object in view. Institutions, laboratories and experimental stations where such pharmaceutical work can be properly carried on should be tabulated and brought into coördination and coöperation. Library facili-

ties for investigational work, which every one will admit is essential and fundamental, should also be tabulated and these data should be in the hands of the research committee which shall have the oversight of this work.

Much may be done quite soon, it has been suggested, in relieving over-worked men capable of research; building up of libraries adequate for research; building up weak laboratories; pointing out to experimental stations and laboratories where the lines are narrow and confined to the standardization of their own products. In the former case they discourage and stifle college men who would enter the field of research; in the latter an inducement for contributions on broader lines is necessary.

Doctor James Rowland Angell, Chairman of the National Research Council, has wisely said, in connection with research, that organization is the clue, and the only clue, to securing some approach to a full interest return on the intellectual capital represented by diverse abilities. In a well conceived general program, place can be found for research of very mediocre ability which, if left to itself, is certain, for the most part, to be sterile. As a matter of fact, much of the best research in the great scientific laboratories has emanated from the planning of the master at the head who, throughout a long period of years perhaps, guides and directs the research of his disciples with the result that knowledge of the highest value accrues from the integrated work of men, many of whom, if left unguided, would be producing little or nothing or even that of accidental or incidental character, sustaining no significant relation to the main currents of scientific progress. He also refers to the universities as agencies from which personnel may be derived. These serve a double function in producing the larger part of the research in pure science at the same time that they train research personnel. It is doubtless the aim of our Association in organizing this branch to stimulate, if possible, this important work and also to correlate and coordinate it. Research work, if left to the accident of individual initiative, is likely to be indefinitely postponed, but if this individual initiative could be linked to and cooperated with other individuals and agencies among the workers and research institutions it is evident that this, with the general leadership, will promote the object in view. Pharmaceutical problems are so closely connected with many other lines of investigation that we can scarcely fail to recognize the importance of co-laborating with experimental pharmacological and bacteriological laboratories, for example, that will assist greatly in rounding out the investigation initiated in the pharmaceutical laboratory. No one individual is, or can be, an expert investigator in all directions. He must be a part of one great whole and cooperate with the different departments constituting the whole.

It is highly important that the American Pharmaceutical Association shall build up an independent research organization; at the same time there should be established a method of contact with the National Research Council so that cooperation in the larger domain of research shall obtain. It need hardly be said that isolation is impossible and a joint working with this national council will be mutually beneficial. In order to ascertain just what the status of our Association would be in case it should connect itself with this Council, your president corresponded with the officials of that body. The matter was presented and discussed at a recent meeting of the Division of Medical Sciences of this body. The



opinion was expressed by the members of that division that it was desirable to coöperate in every way with the American Pharmaceutical Association in its plans for research work. If desirable at any time, a sub-committee of the Division on Pharmaceutical Investigation could be appointed. Many types of investigation are represented in the National Council by such committees and the membership of these committees is in no wise limited to those who are members of the National Research Council. The organization of the Division of Medical Sciences does not contemplate representation of a large number of societies organized among men working in the field of medical sciences, but is made up of a group in part representatives of societies and in part members-at-large who represent the various interests concerned in medical sciences. Obviously, the character of the investigations planned would determine whether they should be presented to the Division of Medical Sciences or to the Division of Chemistry and Chemical Technology, or whether any committee to cover this field should be attached to one or the other of those divisions or become a joint committee of the two divisions. The Division of Medical Sciences would be glad to receive for consideration at any time plans for investigation undertaken or proposed by the American Pharmaceutical Association and to aid in the furtherance of such plans in whatever way it could. The National Research Council is not a distributing agency for funds, because it has almost no funds to be distributed by it for the furtherance of investigation. On the other hand, its work consists in the formulation of and the aiding in the carrying out of plans for coöperative investigation, and to this end it is prepared to help in the securing of the necessary funds.

The representation of pharmaceutical technology is so independent and distinct, however, that if representation on this National Council be secured it should be as a separate division—not a sub-division of or subsidiary to Medicine; while Medicine and Pharmacy are coördinate, the best interests of both will be served and greater stimulus to both will obtain, at present at least, if they each have a separate and distinct representation on the National Board.

In view of the peculiar character of pharmaceutical research, your president believes that coöperation with the National Research Council should be effected through a creation of a separate Division of Pharmacy on Pharmaceutical Technology in this National Council. Pharmaceutical research has much that is medical in its nature and a great deal that is chemical. Its work will thus overlap both the Division of Medical Sciences and the Division of Chemistry and Chemical Technology and should be considered independent of them. Moreover, the field of pharmaceutical technology, whose energies are represented by our many manufacturing houses and whose outlays of capital are very large, is so important that its coördinate nature with chemical technology should be recognized.

May I not ask members of the Association to feel free to offer any suggestions to the standing committee of research in charge of this important subject. I am sure the committee will be grateful for any suggestions or coöperation.

#### PUBLICITY.

For the first time in the history of our organization the importance of publicity has been seriously considered. The Association has become conscious of the rightful claim of the public for authoritative statements concerning the activi-

ties, the findings and of the prevailing spirit and tendency of American Pharmacy. The public press, unacquainted and uninstructed, has at times assumed the attitude of a wise and witty critic of our calling; this is partly the fault of our self-imposed isolation and lack of proper contact with this medium of public service, which should be corrected by furnishing, when opportunity offers, authentic statements as to the service that American Pharmacy has rendered and what it is doing for public welfare. I have been assured that such information will be welcomed by this medium. I feel convinced that the public has only the faintest notion of the service that Pharmacy is rendering to promote human welfare, of the millions of dollars invested in investigation and utilized annually in the manufacture of remedial agents, of the laboratories supported solely for the purpose of research. All this, for finding more excellent agents and preparations and superior and more economical processes for producing them aside from the service of the army of distributors of these agents—an army the value of whose service is only too frequently underestimated and misrepresented. It was a great revelation to one of our public men in Kansas, making inquiry as to the status of our vocation, when he was told that the demand for remedial agents and for material for sanitary purposes classified under the head of sundries amounted in the year 1919 to the sum of not less than \$11,000,000 in Kansas City alone.

Pharmacy, let it be said, is not ambitious for mere notoriety; but Pharmacy as well as Medicine should make known its contributions as part of its public service.

Since this question of publicity has now become intimately connected with that of federation, as it should be for proper efficiency and widest scope, it is gratifying to know that the first step toward federation has been taken in the proper promotion of publicity, as will be reported by the committee in charge of this work. In connection with this difficult problem of federation it may be in place to urge that the comprehensive scheme, so ably presented by ex-President Frederick J. Wulling, should be constantly before us. When the body-pharmaceutic fully realizes the necessary interrelation and interdependence of its various sub-divisions, joint action and federal union will be less difficult to bring about than it seems to be at present. If difficulties, now existing, should be overcome, the beneficial results are sure to become apparent.

Dr. E. L. Newcomb's elaborate scheme, which should be studied in connection with that of Dr. Wulling's, for organizing American Pharmacy, worked out in such minute detail, is a contribution for which this Association is indebted. It is desired that this plan be thoughtfully discussed by the committee of which he is a member and presented to the House of Delegates for recommendations, and that these recommendations be arrived at satisfactorily. These two schemes, mutually coöperative, if put into operation, would, it seems, result in team work that would place Pharmacy on such a high plane as would be enviable indeed. It is believed by many that the difficulties to be overcome—and there are many indeed—will not finally prove insurmountable. Let us not cease to agitate and work toward that to which we aspire until a satisfactory solution of the problem of coöperation shall be accomplished.

The plan of reorganization of our Association, proposed by one of our members and circulated to representative members, is a bold and highly idealistic at-

tempt to broaden the scope and usefulness of our organization. Doubtless, the author of this plucky proposal, Dr. F. E. Stewart, will receive a respectful and sympathetic hearing from our entire membership.

#### THE COUNCIL.

One glancing over the history of the Association will notice how it has been necessary from time to time to meet the growing demands in the administration and legislation of its affairs; how it has required a sub-division of its officers and work. I recall how, early in the eighties, the necessity for the establishment of a subordinate group we call the Council was recognized. I remember how the late Professor Joseph P. Remington was delighted that this step of division and segregation had been taken. The gradual development and unfolding of the work of our organization brought to it last year the recognition of the fact that it would be advisable to facilitate the growing work of this Council to create within the same an Executive Committee that could discuss and formulate such important and pressing measures as would be necessary to present to the Council for action—measures that would arise between the annual meetings and those for which time was too limited to discuss at said meetings. I am inclined to emphasize the importance of this action taken in 1919 and to say, I feel convinced that this further sub-division will result in greater efficiency in the management of the affairs of the Association. Those who study this movement, I feel, will realize that this is a need brought about by a natural evolutionary process connected with the growth of the Association. To your President the meeting and personal contact of the executive committee, held in St. Louis, January 31, 1920, which gave ample opportunity for deliberate and oral discussion of important matters and expedited the work that had to be done, was decidedly more satisfactory than correspondence could possibly have been. As an officer I have felt very grateful to the Association for creating this Executive Committee, for it has surely increased my power of serving the interests of American Pharmacy.

#### CULTIVATION OF MEDICINAL PLANTS.

If one glances over the pages of pharmaceutical literature he cannot fail to be impressed with the interest that members of the profession have taken in the direction of the cultivation of medicinal plants in the United States. Many of our colleges and schools of pharmacy have, in connection with their institutions, botanical gardens that furnish not only veritable specimens for class study, but authentic material for investigation and research. Important and useful as these two objects are, there is another purpose for which we have justly sought Government aid. We would not designate this purpose as a commercial one—not one, at least, as having its root in a purely commercial spirit. The cultivation of medicinal plants has never had, and perhaps may never have, any great amount of commercial vigor in this country. The persistent effort along this line has been rather in the direction of fostering a policy to make our country, as far as possible, independent in every industry possible and to produce for consumption, as far as may be, pure and reliable material. It is well known that the United States, extensive a country as it is, including as it does almost every variety of soil and climate, is capable of growing countless varieties of plants. What medicinal plants may our country profitably produce? What valuable plant constit-

uents and chemical principles may these plants yield in the laboratory of the pharmaceutical chemist? Should we not cultivate a large percentage of those medicinal plants for the supply of which we are now almost wholly dependent upon foreign countries?

These questions alone, it would seem, are sufficient to engage the interest of our representatives in this governmental city. When it is known that excellent results in investigation of a chemical nature in the refinement of pharmaceutical plant products and in the cultivation of plants of pharmaceutical interest under the supervision of the Government and of the Department of Pharmacy at the University of Wisconsin have been obtained, it would seem unfortunate indeed not to support this more liberally.

Interest in such plant cultivation was estimated by the Department of Agriculture, a few years ago, as yielding an annual production of 200,000 pounds of a volatile oil from one of the plants of the mint family alone. It would seem, therefore, that the commercial importance of the enterprise should attract the interest and support of our statesmen. That foreign countries have acquired a commercial eminence, through their interest in this direction, is a fact in itself that should make its appeal to the Government of our own country. Your President would advocate a policy, both state and national, of liberal appropriations for carrying on the work of drug propagation as being in the best interests of the American people. He would recommend in particular that the various schools of pharmacy give the subject of drug cultivation serious consideration, paying especial attention to growing and developing on a commercial scale such drug plants as are found to be particularly adapted to the climatic and soil conditions of their respective states.

#### THE APPRENTICE SYSTEM.

The proper method of training young men and women for the practice of Pharmacy is a subject of profound interest and importance to every pharmacist and should receive our very best thought and attention at all times. There has been a gratifying response over the entire country to the demands on the part of state boards for increased educational requirements, both preliminary and professional, and ere long we may well hope to see a minimum of high school graduation and two years of school of pharmacy attendance adopted as prerequisite for license as pharmacist in all of our states. As educational requirements are increased we must, however, effect a shortening of the period of apprenticeship. Our present plan of three or more years of retail drug-store experience as a preliminary to state board examination must be considered as belonging to a day when only an elementary school education was required for admission to apprenticeship, and some method should be found for progressively shortening this period as general educational requirements increase. Any one who may propose a plan that will make this time of apprenticeship more efficient and shorten the time it consumes will be accepted as a benefactor. The average retail druggist of to-day finds it profitable to buy most of his galenical preparations, which means that his ability to teach a young man typical pharmaceutical procedures has all but disappeared. The heart and soul of the value of time in an apprenticeship is thus lost. To ask a young man to virtually do the work of a domestic for three or four years in order

to perfect himself in Pharmacy is putting too far off the goal to be attained. The experience content of retail Pharmacy can be mastered in perhaps one-third of this time if suitable preliminary education is demanded of the prospective apprentice. The value of proper experience is not to be underestimated, but it should be of a character that has a direct bearing upon the development of the individual along the lines of his vocation.

Your President believes that Pharmacy should emulate Medicine and big business in regard to an added emphasis on the value of general non-professional college training as preparation for life work. Precisely as the pharmacist can become the intellectual equal or peer of the doctor and banker, editor and clergyman, will the profession he represents rise in importance and dignity. We need college graduates in Pharmacy—I mean, now, men who have spent four years in general college study—quite as badly as we need college of pharmacy graduates. I say this because I regard the profession as one which actually needs in many places men of this type. This non-technical training gives poise, character, quality, alertness, to its possessor and is invaluable for professional and business men. Men of this superior training should be encouraged to join our ranks, and the apprenticeship period should be progressively lowered for them as evidence of increasing educational qualification is presented. The better trained the young man is the sooner can he master the detail necessary for him to know; the more also will he appreciate the necessity of perfecting himself in technical detail by pharmaceutical college training. The new generation now growing up about us we should realize should be more capable and efficient to meet the demands of the future than we were.

#### PREREQUISITE LAWS.

We are informed that fourteen states have now prerequisite laws and that others are soon to follow. It is believed by those who are intimately connected with state board work that the time has arrived when prerequisite legislation should be promoted conjointly by the three organizations: the American Pharmaceutical Association, the National Association of Boards of Pharmacy, and the American Conference of Pharmaceutical Faculties. If I were, in this address, to select one of the very important items for serious consideration and action by this Association it would be this very topic. As a practical scheme for bringing about the desired end, joint coöperation of this Association with the others mentioned is highly desirable. This joint coöperation might function as a committee with power to organize a suitable campaign to assist individual states in their contention for such legislation.

#### SCHOOLS OF PHARMACY.

In a very real sense it may be said that the progress of our schools of pharmacy measures the rate of the professional advance of our calling. In the final analysis they are the barometers of our pharmaceutic life. I am not unmindful of the many improvements and advances along lines of retail business; the splendid achievements of our pharmaceutical houses; the industry and progress of our jobbers; surely they are pushing forward with tremendous strides and their activities count for much and should be encouraged. But I should like, in closing this address, to call particular attention, to focus your best thought on what seems to me to be the very center, the nucleus, if you please, of the profession of Pharmacy.

A great deal has been said about the dual nature of our calling, of its commercial and professional aspects, and of their ever-conflicting ideals. This vexatious subject I shall not open up for discussion at this time. We are progressing and we shall continue to progress, I feel sure. Herein lies, to my mind, the very hope and solution of the problem. If we truly push forward in the light of to-day, ever guided by the twilight of days gone by, our divergent paths shall sometime meet and Pharmacy shall find itself. To this end I know of no more potent agency, so full of hope, as our educational institutions. Learning, theoretical and practical, has done no less than win the war and save the world for democracy. Our schools, standing aloof from business, must in the large, point the way of pharmaceutical advance. They can lead only as they have your patronage and support. The next generation of pharmacists must be better trained than the one before. Preliminary educational requirements must first of all be advanced, for in proportion as this is accomplished shall we secure the maturity so badly needed in teaching real Pharmacy, rather than the question and answer smatterings so prevalent to-day. I have no fear for the future of Pharmacy if this Association will support an adequate educational program. The profession of Medicine stands behind its schools to their everlasting credit and profit. Let us do likewise, if we desire the prestige and recognition which are our due.

#### CONCLUSION.

I desire, in conclusion, to express my thanks for the confidence the Association has displayed in honoring me as its president. It is needless to say I shall have your help and support during the sessions over which I am to preside at this annual meeting. If I should err in any rulings I may make, please attribute any such as due to my lack of parliamentary training rather than to intentional self-assertion or prejudice. The opportunity which the office of president has given has been very beneficial in that it has brought more closely to my mind and heart the various interests and problems connected with our vocation. I have been enabled to study them, as it were, at first hand. When I consider these interests and problems I realize the wisdom of the Association in placing its affairs in the hands of such excellent officials as the general secretary, the treasurer, the chairman of the Council, the editors of the JOURNAL and of the Year Book, to say nothing of many others, chairmen of the committees and sections, for example. I have had an opportunity of coming in close contact with these as I could not otherwise have done. What these men are doing and are willing to do for the Association, the average member can scarcely appreciate. As to your president, the conviction has come to him that he should have the enthusiasm of youth and the judgment that comes sometimes with gray hairs; in other words, be a superman. Since this being is yet unborn the Association must always be ready to cover its presidential head with the mantle of charity, for his shortcomings, which, from the standpoint of the many elements that constitute our organization, must be numerous indeed.

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