

THE DEPARTMENT OF THE AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY

C. B. JORDAN—CHAIRMAN OF EXECUTIVE COMMITTEE, A. A. C. P., EDITOR OF THIS
DEPARTMENT.

ADDRESS OF THE PRESIDENT OF THE AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY.

BY J. G. BEARD.

I wish very sincerely to express my appreciation not only for the honor you bestowed in naming me as your president, but for the generous assistance I have received from officers and members alike in carrying out the responsibilities that devolve upon the administrative officer. I wish I could believe that I have vindicated at least in small measure the faith you imposed in my ability, but candor compels the admission that my most earnest efforts have not satisfied the high requirements of the office.

COMMITTEES.

The first official action with which I was faced last year was the appointment of committees. Three principles governed the selections. *First*, distributing the appointees over as many member schools as possible; *second*, utilizing the services of an unusual number of younger men, but balancing the committees with older, experienced members; and *third*, but foremost, of course, selecting committeemen who would most likely perform acceptably every duty assigned to them. This is not said through belief that the appointments of the past year set an unusual standard of excellence, but simply to call attention to a theory that I believe each president should follow. A departure from the custom of the past three or four years was the naming by the president of every member of the Standing Committees, not merely the *chairmen*. Nothing in the By-laws covers this point and not enough is said in the By-laws about committees in general. It seems expedient to add an article specifically listing the standing committees, indicating how they shall be appointed and authorizing the creation of such special committees as changing conditions may require. I, therefore, recommend, (*a*) that this step be taken, and I further recommend (*b*) that a committee of five, headed by the chairman of the Executive Committee, be authorized to make a serious study of the Constitution and By-laws and submit at the meeting in 1931 such recommendations for revision as in its judgment are needed. Article 3 in the Constitution illustrates the need for a re-drafting that is found in several other places in the code. It relates to membership and is thus phrased: "The Association shall



J. G. BEARD.

consist of the colleges of pharmacy represented at the organization meeting of the American Conference of Pharmaceutical Faculties held at Richmond in 1900, and of those colleges of pharmacy which subsequently have been or *shall* be admitted to membership." Note the use of the word "shall."

Committee D on the Relation of Boards and Colleges is a Special Committee. I recommend that it be made a Standing Committee. An over-emphasis can hardly be placed upon the potential value of this Committee when or if it is allowed to operate in a logical manner. For this to occur there must be both an increase in the number of districts and a re-alignment of the states within each district. To illustrate: District 9 embraces Arizona, Alaska, California, Nevada, Oregon and Washington. The territory is obviously too extensive to permit the board and faculty members of all the states to meet together annually. District 8 presents a similar situation. Consequently I recommend (a) that a committee be appointed to confer with a similar committee from the National Association of Boards of Pharmacy for the purpose of re-districting the several states; (b) that the N. A. B. P. at its present session be requested to authorize such a committee; and (c) that the joint committee be empowered to act.

THREE TYPES OF MEMBERSHIP.

Reference a few minutes ago to membership requirements suggests that we might very well consider having three sorts of memberships: (1) Regular members, limited to colleges satisfying our every requirement. (2) Junior member, limited to schools that in every particular excepting the five-year age rule conform to our highest requirements. (3) Associate members, limited to colleges which in every particular save length of degree courses satisfy our highest requirements. Executive privileges would, of course, be allowed only to colleges of Group 1. The adoption of such a plan would likely cause the immediate membership of four colleges; the re-affiliation of at least five schools, and it would permit restricted membership to such colleges now regular members that may find it impossible to meet the four-year rule in 1932. Two opposing opinions will perhaps be aroused by a proposal of this sort. The one holds that such an organization as the A. A. C. P. should be open only to such colleges as can and will conform to the highest possible educational standards. The other recognizes (a) that a peculiar condition exists in pharmacy that has no parallel in other branches of education, and (b) that this organization can go farther and faster in encouraging higher requirements among all of the better colleges if it has a membership contact with them all. No recommendation is attached to the above-described plan for membership re-organization. It is offered merely for your consideration and only because of certain possible developments that would be very unfortunate both for this Association and for educational progress in pharmacy.

ALTERNATE DAY INSTRUCTION UNSOUND.

I have been reliably informed that certain schools in this Association still maintain a three-day-a-week schedule of class-room work. I feel certain that such a plan is pedagogically unsound. The requirements for membership make no reference to this point which leaves us in the implied position of supporting such a policy. This impels me to recommend that the following statement be

added to the first paragraph of Section 3, Article VI of the By-laws; ". . . such instruction to extend over at least five days of each active week of each school year." The complete paragraph would then read: "The institution shall include in its course of instruction, oral lectures, personal laboratory work, recitations, and reviews, such instruction to extend over at least five days of each active week of each school year." (The term active is employed so as not to make instruction mandatory during regular vacation periods.) I recommend further that this amendment be made effective on and after July 1, 1932.

AMPLIFYING ARTICLE VI OF THE BY-LAWS.

The third paragraph in Section 4, Article VI of the By-laws should now be amplified. It reads: "After July 1, 1932, member-colleges will require for graduation not less than four full college years of at least thirty weeks each." I recommend the following substitute paragraph: "After July 1, 1932, member-colleges shall require for graduation the satisfactory completion of not less than 3000 hours of instruction, of which at least 1200 hours shall consist of lectures and recitations and at least 1500 hours shall consist of laboratory work, such instruction to be given within a period of not less than four full college years of at least thirty-two weeks each. At least two months must elapse between each regular school session." I further recommend that on and after July 1, 1932, the above-quoted requirement shall replace the first paragraph of Section 4, Article VI of the By-laws.

VISITATIONS SHOULD BE CONTINUED.

I have followed with keen interest the plan undertaken three years ago to have each member school in the Association officially visited triennially by some responsible person for the purpose of focusing upon the school the friendly and constructive criticism of a competent outside observer. In my opinion the plan has been productive of real results that more than justified the costs and time involved in its operation. Since every member college has now been visited and a decision must be reached this year as to whether a new series should be begun I urge and recommend that the Chairman of the Executive Committee be authorized to continue the plan, following the same methods heretofore employed.

CLERICAL ALLOWANCE FOR ACTIVE OFFICIALS.

In no perfunctory manner I wish to call attention to the splendid service given this Association by the Secretary-Treasurer and the Chairman of the Executive Committee. One must deal intimately with the affairs of the organization fully to appreciate the prompt, efficient and devoted character of their work. Each receives an honorarium of \$100 annually. Since this sum represents in no way an adequate reward for their services, and since neither will agree to its increase, the least we can do is to spare them certain clerical duties by appropriating to their uses an amount sufficient to employ part-time assistants when association business and college responsibilities unite to overtax their time. I recommend, therefore, that a sum not to exceed \$250 a year be allowed each official for office expenses.

PREPARATION OF AN INDEX.

The proceedings of this Association are rich in material that often serves no purpose because it is not known about by the younger members or cannot be easily located by those who do know of its value. A master index covering every proceedings up to this time should be prepared by some member appointed by the incoming president, such index to be published in the next issue of the proceedings. I recommend that this be done.

PHOTOGRAPHIC DISPLAYS.

In my visits to various colleges in the Association I have been surprised that many of them do not possess, and, therefore, cannot display in their libraries or hallways, the pictures of teachers and scientists whose names are linked with notable achievements in the various divisions of pharmacy. On inquiry it developed that such pictures were lacking either because *the schools concerned could not afford expensive prints or because they knew not where to secure photographs of size sufficient for display.* I took the liberty, therefore, of asking Dean J. W. Sturmer, of Philadelphia, to secure from a reliable firm quotations on uniform size photographic enlargements. He reports that Mr. John H. Taws, located at 920 Arch St., Philadelphia, is prepared to furnish, at \$2.00 each, stock reproduction of paintings of Liebig, Faraday, Davy and many other scientists prominent in chemistry biology, etc.; and will furnish 11 x 14 photographic enlargements of prominent pharmacists at \$12.00 a dozen, or of size 16 x 20 at \$18.00 a dozen, provided in the latter case that original photographs are submitted to him. Dean Sturmer reports further that his college can supply Mr. Taws with pictures of a considerable number of prominent earlier-day pharmacists. Historian Eberle of the AMERICAN PHARMACEUTICAL ASSOCIATION promises to make available for such purpose a large number of photographs stored in the archives of his ASSOCIATION. Dean Edward Kremers, of Wisconsin, possesses and would lend to a reputable firm a great number of pictures not only of men but of old appliances, famous apothecary shops, noted institutes, etc. He mentions Gutekunst, of Philadelphia, and the University photographer at Wisconsin as capable of making excellent reproductions. I believe that a real service would be rendered schools of pharmacy if Deans Sturmer and Kremers would undertake to collect and make available reasonably priced photographic enlargements of such material as is of historic interest to every pharmacist. If you agree that my representation of the situation is correct, I hope you will endorse the plan and request the two to execute it for us.

HISTORY OF MEMBER SCHOOLS.

The above paragraph brings to mind another matter of history. Would it not be well to secure and store in our archives a summarized history covering the establishment and development of each of the schools holding membership in this Association? Many of our schools still number men who could prepare from memory interesting and important historic data about their institutions that have never been recorded but which should be obtained before it is too late and filed for future use. The securing of such data, if you believe it should be obtained, could best be done by an experienced student whom we should elect as Historian.

Surely this organization would profit from the services of such an official and in order to get the matter before you for action I recommend that the above plan be put into effect.

THE NEED FOR PROPER PUBLICITY.

Most of us have likely contrasted the national and local publicity given the annual meetings of this Association with that paid to conventions of other professional societies. The local papers give our meetings a perfunctory write-up and the national lay journals ignore our assemblage altogether. Is this because our conventions are wholly lacking in general reader interest, or is it because we are at fault in not initiating the publicity, or is it because we do not wish our proceedings advertised? In my opinion a useful purpose would be served by extensive publicity of a dignified character, and I hope that some plan can be evolved at this meeting calculated to give our proceedings such prominence as they are entitled to receive. It would impose too much upon the time and energy of our Secretary to ask her to undertake additional work, and so I suggest that each year the incoming president appoint a competent delegate to act as a reporter charged with the duty of selecting and offering for publication such material from our deliberations as would be of interest and value to the drug and lay publics.

EXCHANGE PROFESSORSHIPS.

For some time I have felt that pharmacy schools could profitably adopt a plan that is practiced in other divisions of education. I refer to Exchange Professorships. Such a plan is helpful alike to the schools and to the teachers temporarily transferred to other institutions. The teacher is himself broadened by his new contacts; the school to which he goes profits by his ideas and methods; and a more sympathetic understanding of mutual problems is enjoyed by the schools making the exchange. Most teachers tend to narrow their activities into environmental grooves when they stay year after year in the same college. This delimitation of energy, unconscious on the part of the teacher, is hurtful to the college and is corrected only by a transfer to other surroundings having different perspectives, values and methods. Leaves of absence are not always possible either because the teaching staff in smaller colleges is not large enough to absorb the absentee's load, or because the reduced income necessitated by employing a substitute causes a sabbatical leave to be too much of a sacrifice for a teacher with a family to make. If, however, he were going on full salary for a year to another institution with his place being taken by a competent exchange professor, his need and the need of the school for a change would be served without penalty anywhere. I recommend that this Association endorse such a plan and that it encourage pharmacy schools to follow the example of other professional schools and inaugurate a series of exchange professorships.

ENDOWED RESEARCH IN DRUGS.

Some months ago announcement was made that the late Stuart Wyeth, ex-president of John Wyeth and Son, had willed unconditionally the sum of \$5,000,000 to Harvard University. Such bequests are not unusual but, unfortunately, they are nearly always made either to universities like Harvard, Princeton or Chicago,

that have no departments of pharmacy, or else for specific non-pharmaceutical purposes to institutions having schools of pharmacy. The result is that only on the rarest occasion does pharmacy participate in the gifts made. It is becoming increasingly the custom for persons of great wealth to make wills specifying that a generous share of their estate is to be used for educational and scientific purposes. I cannot but feel that pharmacy fails to benefit from such philanthropies because the donors were not made aware that the science of drugs is in crying need of funds with which to expand and extend its usefulness to humanity. The average layman looks upon health preservation and disease control as falling solely within the province of physicians, and when money is willed to further these ends the gift is made to institutions of medicine. The public is ignorant of the part that pharmacy plays in such a campaign and therefore fails to realize what a tremendous power for good would be set in motion were drug research properly endowed. No disparagement to the science of healing is intended and no invidious comparison is implied when the statement is made that medical science is being hindered in its progress because the study of medicines *per se* is subordinated to investigations less important. Research in other fields of human betterment is richly supplied with adequate funds and facilities, but extensive research in pharmacy is limited largely to drug manufacturers who, necessarily must commercialize more or less whatever results they obtain. The reason and the remedy for the paucity of real research in our field are obvious: Money! Men are available but means are lacking. If the actual situation were properly presented to the alumni of our colleges and by them passed on to men of wealth seeking a wise way in which to endow worthy causes I believe there would be a gradual awakening to wonderful opportunities hitherto neglected. Pharmacy and the public would, of course, profit from this form of beneficence. Feeling that this Association could engage in no more helpful effort than in studying ways and means by which to stimulate on the part of philanthropists interests in a work that now commands no interest I recommend that a committee of five be appointed to give this matter serious thought and report their conclusions at the meeting in 1931.

COUNCIL ON PHARMACEUTICAL EDUCATION.

In line with the adopted recommendation of President DuMez last year that a Council on Pharmaceutical Education be created composed of three members each from the American Association of Colleges of Pharmacy, National Association of Boards of Pharmacy, and AMERICAN PHARMACEUTICAL ASSOCIATION, I took the liberty of asking Dean DuMez to present to the Executive Committee of this Association at its May meeting a model outline for the organization and guidance of such a council if or when it is authorized by the three associations concerned. His outline will have been acted upon too late for such action to be incorporated in this address, but anticipating its acceptance by the Committee I wish to recommend that machinery be set in motion at this meeting designed to secure the cooperation of the other associations and to hasten the appointment of the nine composing members so that shortly the Council can commence its activities.

ASSOCIATION DEVELOPMENT.

The American Association of Colleges of Pharmacy was established in Richmond in 1900 as a medium through which a variegated assortment of colleges

could work for the furtherance of their common good and for the promotion of such educational standards as would heighten the quality of pharmaceutical service. Beginning its career with the advent of the new century the Association entered upon a program of constructive accomplishment that seems greater now than was perhaps apparent at the start when enthusiastic courage and energetic faith blinded the organizers to the difficulties of their task. Thirty years ago not a state in the Union had a prerequisite law in force and only one or two had such a law in prospect. The preceptorial system was firmly established and majority opinion viewed it as satisfactory. Colleges of pharmacy not only did not have the sympathetic support of the mass of retail druggists but they were surrounded and in some cases almost stifled by a cramming system of instruction that offered a quick, cheap route to full licensure. This condition prevailed because druggists collectively and the people at large did not believe that legal requirements for pharmaceutical practice should embrace compulsory college training. The colleges themselves, with several noteworthy exceptions, were a heterogeneous group that in organization, aim, scope, curriculum and policy reflected a woeful lack of coordinated endeavor. Each was an independent unit in a competitive struggle that was in many instances based primarily upon numerical supremacy. The capital that such colleges invested in their students was expected to show profits, or at least no loss, and the quality of instruction was graded upon the amount of revenue received from tuition fees. Such a description hardly exaggerates the condition that faced the organizers of this Association when they met in 1900, and we need it as a background against which to contrast the developments of the past thirty years and with which to gage the character of our present problems.

RECOGNIZED LEADERSHIP.

I have just finished a rapid reading of the thirty volumes of proceedings that have been published by this Association. No one can do this without feeling a heightened appreciation of what the organization has been able to accomplish in its relatively brief period of existence. Here and there in the pages one comes across situations that were critical but which were handled with a diplomacy that averted serious trouble. At no time, however, did the organization appear to face a situation that offered the stern test and challenge that face those of us who are guiding its destiny to-day. Thus far the Association has made a number of distinct constructive contributions to the upbuilding of pharmacy, educationally, professionally and commercially. Particularly in the past few years has it achieved much of a progressive nature. At this time the Association is without doubt recognized as the leader in promoting educational standards in pharmacy. In this leadership it has the confidence and respect not only of other pharmaceutical bodies but of educational authorities generally. The sincerity and sanity of its efforts are now taken for granted. For these and other reasons it is in a position for the first time since its organization to assert its leadership. In so doing, however, we must all agree that it should not become over-zealous in its activities and make rigorous and exacting demands of its member schools. Instead it should use its new found strength in helping those schools which need help and should formulate its policies in such a way as to exhibit the highest degree of tolerance and patience that is consistent with steady progress.

THE CURRICULUM.

As we all know, the principal matter of business to be transacted at this meeting concerns the development of a model curriculum for the four-year course of study. Conflicting points of view will necessarily develop in formulating such an outline since widely divergent opinions are held upon the subject matter that should be taught in the baccalaureate course, but we can at least enter open mindedly upon a discussion of the Curriculum Committee's findings and, if necessary, make reasonable compromises even with deep-seated convictions.

SYMPATHETIC CONTROL.

This certainly ought to be done, for otherwise we shall reach an impasse completely blocking progress. This Association is composed of three distinctly different types of schools, each with its peculiar problems and each feeling that its destinies must be worked out in a particular manner. The facts are not exaggerated by the statement that upon the action we take in regard to the curriculum rests the question of whether we are to lose or to hold the membership of certain schools that have been affiliated with the organization since its founding and which would withdraw only with the deepest reluctance. Our attitude in fixing upon the character of the four-year course should be generous rather than autocratic. Not even what is pleasing to the greatest number but what is possible for each of our members should at least influence if not control our action in this whole question. The requirement of cultural subject matter in the new course illustrates my plea. There are several of our member-colleges that are not now organized and in the near future cannot organize to teach history, languages and other courses that University schools with their arts colleges can easily and without much added cost introduce into their curricula. What position shall this Association take toward such cases? Three courses are open. (1) We can say that the four-year course offered by a member school *must* include a fixed and liberal amount of prescribed cultural studies. If we do this we will likely cause the resignation of several schools that are doing excellent work and which for years have contributed to the progress of this Association. (2) We can say that if the baccalaureate degree is conferred by a member school the course leading to it must include a generous amount of cultural matter, but if, however, some other than the baccalaureate degree is to be awarded then the course may be composed almost entirely of technical subjects. (3) We can outline the length of the whole course in weeks, specify the minimum amount of technical training, and recommend but not make mandatory a specified amount of cultural study. Of the three courses open to us I earnestly recommend the last mentioned, not because I think it satisfies our educational requirements, but because after studying carefully all of the circumstances which are involved and weighing them in terms of fairness and expediency I believe it is the wisest course to pursue at the present time.

BUSINESS SUBJECTS NEGLECTED.

While on the subject of the curriculum I am forced by my convictions to reiterate what I have repeatedly said before this group on former occasions, namely, my belief that pharmacy schools generally should devote more consideration to the teaching of business subjects. Two aims should dominate our educational policy.

First, our curricula should be shaped and our teaching administered in such a way as to prepare our students to perform the highest, broadest, finest type of professional drug service that they in their generation may reasonably be expected to encounter. Vision and idealism should be generously used in formulating such a program with full consideration given to all trends that seem to have a developmental significance. *Second*, we should also train our students in such a way that as graduates they will not impose upon employers the job of teaching them business principles that can better be learned in college, and in order also that such graduates may have a practical knowledge beforehand of the duties they must inevitably perform as drug salesmen in modern drug stores. One fact, it seems to me, stays hidden from the sight of too many of us who teach pharmacy students. That fact is this: Retail Pharmacy always has been, is now, and always will be a specialized form of scientific commerce. That it has professional aspects no one can justly deny, but its predominating character cannot be changed by a pedagogical pretense that in the end fools no one. If those of us who teach pharmacy were compelled for one year to own and operate an average drug store, that is, actually practice retail pharmacy, and subsist wholly on the profits made therefrom, we would return to our class rooms with a new conception of what is demanded of present-day practitioners and, therefore, of what we should teach. We would be made keenly conscious of the fact that retail pharmacy is unquestionably a scientific business, and realizing this and realizing further that we will now have four years for the task we would be more prone to educate our students both for the science and for the business that they must inevitably practice. My whole argument is this: Superimpose instruction in scientific and business subjects on a cultural basis, and then emphasize science more than commerce, but when a foundation of liberal knowledge has been laid and a full measure of scientific material has been added, then finish the educational structure with what it needs in order completely to serve its purposes. Manufacturing and dispensing knowledge is essential for the protection of public health; cultural development is essential for the fullest measure of happiness; commercial knowledge is essential if the scientific practice is to pay for itself and the cultural element is not to be pecuniarily embarrassed. We should coordinate the three forms of knowledge in college where they can best be harmonized and assimilated. No amount of blinking can hide certain obvious facts that compose a condition and a challenge that are clear. Can we ignore them when we fashion our four-year courses?

SUMMARIZED RECOMMENDATIONS.

The recommendations in the foregoing pages are twelve in number. That they may more easily be examined I am summarizing them below.

I have recommended:

1. (a) That an Article be added to the By-laws dealing specifically with Standing and Special Committees. *See Par. 2.*

(b) That a committee of five be authorized to study the Constitution and By-laws and report in 1931 its conclusions concerning needed revisions. *See Par. 2.*

2. That Committee D (on the Relations of Boards and Colleges) be changed from a Special to a Standing Committee. Also that the several states be re-districted in order that Committee D may function more effectively. *See Par. 3.*

3. That beginning July 1, 1932, all member-schools shall adopt a five-day-a-week schedule of instruction. *See Par. 5.*

4. That Section 4, Article VI, of the By-laws be amplified to cover the new four-year course, setting up 3000 hours of instruction and four years of thirty-two weeks each as minimum requirements. *See Par. 6.*

5. That official visitations to member-schools once in each triennium be continued. *See Par. 7.*

6. That the Chairman of the Executive Committee and the Secretary-Treasurer be each allowed not more than \$250 annually for clerical assistance. *See Par. 8.*

7. That a Master Index of all Proceedings to date be prepared and published. *See Par. 9.*

8. That summarized historical data concerning each member-school be secured and stored in the archives of the Association by an Historian to be appointed. *See Par. 10.*

9. That the Association endorse the plan of Exchange Professorships. *See Par. 13.*

10. That a committee of five be appointed to determine if possible a practical means of stimulating interest in Drug Research on the part of philanthropists. *See Par. 14.*

11. That machinery be set in motion immediately to hasten the establishment of a Council on Pharmaceutical Education. *See Par. 15.*

12. That the Association outline in weeks the length of the four-year course, specify the minimum amount of technical subject matter, and recommend but not make mandatory a specified amount of cultural studies. *See Par. 20.*

CONCLUSION.

I am concluding this address without having considered subjects that I particularly wanted to dwell upon. So much time at this meeting must necessarily be devoted to the report of the Curriculum Committee that I deemed it unwise to take up more subjects than those I felt compelled to discuss. I wish finally again to thank you for the honor you conferred upon me and for the helpful assistance I have received throughout my tenure of office.

DECOMPOSITION OF ALKALOIDS IN SOLUTION, ON STERILIZATION.

A number of solutions of alkaloids were examined by the ultraviolet spectrograph by the Hartley-Baly method in order to solve the problem of decomposition on heating. *Atropine, Hyoscyamine and Scopolamine.*—By comparing the spectra of these three alkaloids with those of tropine and tropic acid, it is seen that the character of the spectra of the alkaloids is determined essentially by the tropic acid, and the changes of the three alkaloids on sterilization are to be referred mainly to changes in

the tropic acid. The experimental method employed is not capable of deciding the nature of these changes. *Yohimbine.*—Yohimbine solutions undergo a continuous change both on keeping and on sterilization, often with the production of visible color. If the solution is heated in nitrogen instead of air, only slight changes occur at 100° C. It is therefore best to fill the ampuls in carbon dioxide. If this is not done, then sterilization should be carried out by Tyndallization, since the duration of heating is of less effect than the temperature. The solution should not be kept long.—*Quarterly Journal of Pharmacy and Pharmacology.*