

their cure, to employ good physicians and pharmacists, who together alone can give the best service yet evolved by medical science and research.

In conclusion let me say that I suppose some of the things I have said have surprised or even possibly offended some of my hearers. I have spoken in sincerity and out of an experience extending over many years and out of knowledge that entitles me to say all I did say.

[EDITOR'S NOTE: The paragraph in which request was made of the radio audience to communicate with the speaker relative to points of the talk is omitted.]

INDIVIDUALISM VERSUS EDUCATION.*

BY CLAIR ALBERT DYE.

Whether it is an inherited characteristic or the result of environment, the fact remains that whenever a group of pharmacists and pharmaceutical educators get together, sooner or later the ever-present question of the training of the future pharmacists is discussed. Probably this is as it should be, for the question has a most important bearing on the type and character of those who are to direct the policies and ideals of pharmacy in the future. For the most part we feel quite sure both groups have but one end in view, that of not only protecting but also that of advancing the good name and rich heritage that the leaders in pharmacy, in the past, have bequeathed us.

What these ideals and policies shall be is hardly a question to be decided at the moment or as the result of an impulse. Rather should they follow as the result of these serious discussions from which must eventually come, by this refining process, something worth while; something that we may pass to the future generations with the feeling that they will stand the test of time.

If one is interested in studying the historical development of the educational requirements and training of the pharmacist he will find that the subject has long been a bone of contention in the ranks of pharmacy. It is scarcely necessary to recount the widely divergent viewpoints of those concerned with these discussions since they are a matter of record and are to be found in all our journals, reports and proceedings of the meetings. At times these discussions were acrimonious and often threatened to disrupt the associations, but thanks to the wisdom of the men in charge we came through the storms in safety. As a result of these we have gradually developed our present standards, policies and ideals; but even so are they sufficient and in keeping with the educational advances of the other professions?

As might be expected this development has been slow since the process has been largely evolutionary. In consequence some of us have been impatient with the progress we were making. Many of us naturally tried to hasten the process with the result that we were considered revolutionary in our efforts. Be this as it may, life after all is an evolutionary process, wherein Nature as well as all our surrounding contacts, tend to smooth and tone down all our selfish and unreasonable habits and desires. It is well, perhaps, to emphasize the phrase "tend to," for it seems that one of the bad habits which mankind has not yet outgrown is to treat

* Section on Education and Legislation, A. Ph. A., St. Louis meeting, 1927.

with distrust and often decisive or even vigorous opposition all new, original or progressive ideas and methods. It seems that we all have this one remaining habit to a greater or less degree. It is this which makes pioneering of any sort discouraging, no matter whether it be in educational standards, discoveries in science, in medicine or what not that is new, some one is sure to rise in opposition to them. History is full of such examples. Even the Greeks with all their reputed wisdom and culture, were not always enthusiastic and often even inhospitable to the new things which they pretended to be anxious to see and hear. So why be discouraged? In the face of opposition of every sort we have made progress educationally, not only in higher standards, but in better equipment in our schools and in our teaching methods. And now that we have these to our credit, how many would be willing to go back to the time when educational standards were a myth; when equipment was meager and of teaching methods there were none? The answer, we are sure, is self evident. Surely we will find not one.

In the training of the former generations of pharmacists there were many circumstances and conditions which tended to make them not only individualistic, in their attitude toward others, but in many instances even rank exclusivists. This condition was generally to be expected since the training, in the early periods, was obtained in the store and usually under one man. Later this was sometimes supplemented by a brief college training in a privately conducted school devoted exclusively to pharmacy and the closely related subjects. While obtaining this training the students had few if any contacts with students in other lines of work or those having different ideas and ideals. With such a system of training there is little wonder that the product was highly individualistic in character and that this attitude was passed on from one generation to another. To the foregoing system there came in later years, at least, one redeeming feature through the public school training which most of the candidates received. This we all know, in the higher grades at least, tends to reduce all students to a common level and to instil into them more or less of a tendency to self control and respect for the opinions and rights of others.

Unfortunately, however, it has not been so very long, since one could attain to the rank of a registered pharmacist without ever having enjoyed for even a few years, the humanizing and liberalizing influences of the public schools. Indeed, it has not been so very long, as time goes, that we have thought it worth while to require the students in pharmacy to obtain even a high-school training, much less compulsory college training. We might add that some even to-day do not seem to feel that such requirements are essential. We are, however, awakening to the fact that if we are to escape the baneful effects of so much individualism, we must do so through a much broader educational training.

If we stop to consider the underlying influences responsible for most of our present conditions in pharmacy, we will find them traceable to this early and inbred spirit of individualism. Witness the lack of interest in and the lethargic attitude of the majority of pharmacists toward all united effort in their behalf as expressed in their local, State and national association. Why this should be, is hard to realize, especially when the evidences of their activity, in behalf of pharmacy, are on every hand. It is certainly this attitude that has militated so long against any very united or concerted organized effort in pharmacy.

Realizing the existing conditions, our problem is to overcome them. The solutions may not be easy. Each of us may have a different one. But to me it is evident that it must come largely through education, not only of many now in business, but especially of the generations to come. By this I do not mean through a highly specialized training in pharmacy, for as we have just learned, this tends toward individualism. Rather must it come through a broadened and more liberal training, where we will find not only the highly specialized subjects in pharmacy, but also the related sciences along with those of business, economics, psychology and the like.

There will no doubt be many who are not ready to subscribe to such a curriculum for pharmacy students. However, as was previously pointed out, this attitude is but natural if we run true to form. Recognizing the position of pharmacy of to-day, why not realize the fact and give the students the training necessary to meet the conditions as they are and not as they were twenty-five years ago or as we might wish to see them.

Another, and to me a most important feature of such a training, is the liberalizing influence that will come, not only from these varied subjects, but especially from the contact of the pharmacy students with those in other vocations. In fact, such contacts are not only liberalizing in their influence but will tend to create in the minds of the students a realization, as well as an appreciation, of the value of team-work without which there can be no great progress. This feature has been so admirably set forth in a paper by E. G. Bryant, Ph.C., at a meeting of the North Eastern Branch of the British Pharmaceutical Society at Aberdeen, that I wish to quote from his paper. In this he says: "A student should not be permitted to attend his qualifying or technical subjects till he has completed the Preliminary Scientific work, and that the latter subjects should be taught in such a way as to bring home to the students their cultural value. For this reason the courses should be those attended by students of other vocations, and to my mind, it would be far better to have these subjects taught at universities rather than in technical schools, for there our students would mingle with students in Arts, Science, Medicine Agriculture, Engineering and Commerce, rather than be isolated in a class which is drawn up with an eye upon the pharmaceutical students only. I am convinced that the cultural value of contact with other students and teachers whose views are not limited to one vocation would be immeasurable." Such statements, coming as they do from one having experience with all types of instruction, are surely worthy of our most serious consideration. Some, no doubt, will say, why require all this educational training for a pharmacist when, as now practiced, pharmacy is little more than a heterogeneous mixture of merchandizing with a few drugs and little, if any, real pharmacy? Granting this, there is a reason, in fact, many of them, as to why this broadened training is necessary.

In the first place, we must admit that there is still some pharmacy practiced in almost all stores, and in many others it is one of the chief features of the business. Moreover, if we may judge from the statements of those who know, the pharmacy side may be materially increased in many ways. This being the case, it is evident that the training cannot be developed on the minimum condition, but rather so adjusted as to include all. Then, if it is preferred to develop the merchandizing side, the training will not prevent doing so. The same is also largely true of the

commercial training or at least to a certain extent, since a knowledge of business methods and principles is necessary if one is to conduct a successful ethical store. Again as we all know there is not only a commercial, but also a very high value of respectability attached to the name pharmacy, else the patent medicine and highly commercialized stores would not be so keen to use the name. To do this, there must be some one, or at least there is supposed to be some one, present most of the time who has had some pharmaceutical training.

On the other side of the question we are constantly told that in even the average store the business is largely commercial. To meet these conditions one must have a keen business ability, as well as a commercial training if the business meets with any financial success and, after all this is most essential. Indeed one could well say that in conducting any business there must be a careful and intelligent management. It is to meet such general conditions that we have established, speaking generally, our departments and colleges of commerce and business in which all phases of business are studied and discussed. It might be further observed that in these schools four years of a liberal training is required. We also seriously doubt if the deans of such schools ever receive inquiries as to the shortest time required to complete the work, since this is understood by all to be four years.

What is the result of these conditions and training? Business has taken on a new realization of its importance and place. The schools are filled with a fine type of keen, enthusiastic, aggressive young men and women who are looking forward, with professional pride, to a career in business. They look upon the work as a profession and they have had a liberal enough training to escape the narrow confines of individualism and to see and appreciate not only the advantages but the humanizing value of active and collective coöperation to its fullest degree. They have developed a vocational morale without which no group may hope to succeed.

Contrasting with this the present training and professional spirit in pharmacy, what do we find? The training is highly specialized and restricted to the technical subjects necessary to produce pharmacists, but without the liberalizing contacts with other vocations. In consequence the professional spirit is either wanting or apologetic and the resultant product is individualistic to a high degree. To avoid these conditions let us liberalize and broaden the training to conform to a minimum four-year course which will produce not only good pharmacists but also good citizens. By so doing we will create a new pharmaceutical consciousness, replacing individualism with a professional solidarity and helpful fellowship. It is through these qualities and the liberal education of the pharmacists of the future that we may hope to lead pharmacy through the slough of despond into the light of a new found experience.

QUININE GROWING IN FRENCH INDO-CHINA.

Attempts have been made for the past ten years to acclimatize the cinchona tree to the climate of Indo-China. The Pasteur Institute has been behind these attempts, and while the development was slow it was good. In

1923 about 300 cinchona trees were planted at Dran and toward the end of 1923 there were indications of satisfactory growth. This region of Indo-China may prove a center for this culture.

(Consul H. M. Cookingham, Saigon, Indo-China.)