

ABSTRACT OF DISCUSSION.

Lyman F. Kebler stated that many persons could not understand why the Post Office would not accept Labarraque's Solution and other chlorine-yielding preparations, as under some conditions chlorine gas would be given off, and that the gas or the spilling of chlorine solutions would bleach writing, corrode metal articles, and destroy photographic plates and films, when coming in contact with these. His Department welcomed direct information concerning the nature of preparations, as testing was the only means of learning the composition of such compounds, where no other information is available.

John C. Krantz, Jr. stated that the U. S. P. X formula was submitted by the University of Maryland; that he had this preparation tried at the Johns Hopkins Hospital, and the pharmacist there, had no difficulty in filtering the fluid from the precipitate, although the precipitate was bulky. He asked if the stability tests were made on solutions adjusted to the same degree of alkalinity, stating that Dakin's solution with a p_H 9 to p_H 11 were practically stable, and this was the controlling factor in the stability of the preparation.

I. M. Kolthoff agreed with the former speaker on the stability of Dakin's solution, and asked if the author experienced difficulty with the end of the titration.

Irwin A. Becker, answering the last speaker, stated that in titrating the iodine, the reagent was added to the solution until a pale yellow color was obtained (nearly the end-point), when the starch solution was added and the titration continued to the end-point, being careful not to overstep it.

In assaying chlorinated lime he found instances where the end-point was indefinite (the blue color returning after disappearing), the iodine apparently being liberated very slowly.

The addition of more acid, in each instance, made the end-point sharp and the discharge of the blue color permanent.

In regard to dichloramine-T he found no first-class sample, some being fairly good when first opened, but soon developing a strong chlorinous odor. He would readily recommend a solution like Dakin's, or a more concentrated one of similar kind, but it could not be sent through the mail because of bleaching, in case the container was broken or leaked.

In answering Dr. Krantz, he stated that he started out with the idea that heat was a more destructive agent than it proved to be, and because of this the sodium phosphate solution was allowed to become entirely cold before using in one batch of U. S. P. X formula, and dissolved in a larger amount of water so that it should not crystallize when cold.

One liter of Daufresne's formula was finished in 35 minutes, while the U. S. P. X liter, with the cold sodium phosphate solution, was allowed to filter over night and was not finished until after 8:30 A.M. the next morning, hastening it all he could.

Two batches were finished in one evening, the calcium phosphate precipitate requiring double the time of the calcium carbonate precipitate formula. The two proprietary preparations proved exceedingly stable under the heat conditions, more stable than the neutral solution made by precipitating the lime from one of them, this lime alkalinity being objected to by some of the doctors. Under very bad influences it became below par before four days.

THE SECTION ON EDUCATION AND LEGISLATION: ITS STATUS AND CHANCE.

BY J. G. BEARD.*

During the last few years the Section on Education and Legislation of the A. Ph. A. has failed to secure the support and interest which its intended position in the association machinery warrants. From being the most popular section in the organization, it has become the least liked, not so much from positive as from negative causes. Various reasons are advanced to explain the decline in prestige and power which it once enjoyed, and among these reasons are two which are most

* Secretary Section. A. Ph. A., 1924-1925.

often cited. The first is a claim that the American Conference of Pharmaceutical Faculties has gradually taken over or absorbed its educational functions, and the second is an assertion that the House of Delegates of the A. Ph. A., the N. A. B. P. and the N. A. R. D. have relieved the section of its legislative responsibilities. Having but two concerns—education and legislation—and these being handled elsewhere, it follows from such reasoning or claims that the Section is doomed to inanition and final death. This is good argument if it is true, but suppose we examine the facts in the case and see if they justify the conclusion so many members have reached that the Section is left without further excuse for existence.

Education and Legislation are issues which in pharmacy as in any calling require constant and comprehensive attention. Together with Merchandizing they compose the pharmaceutical trinity. Each of the three is in a constant state of flux, each is made up of a number of phases, and each demands an intelligent, unremitting, and sympathetic supervision which pays due regard to every interest which each affects.

Consider, for example, the first member of the trinate body, Education. There are in the United States sixty-odd schools of pharmacy charged with the duty of training the druggists of to-morrow. More than one-half of these schools are members of the American Conference of Pharmaceutical Faculties, and in that association their interests are so well cared for that we may for the moment dismiss them from our thoughts. A portion, however, have no needed medium through and in which they may discuss and act upon problems which to them are as pressing for solution as any encountered by Conference colleges. For one reason or another they cannot or will not affiliate themselves with the Conference because its requirements for membership are either unsuited to or are beyond the bounds of their particular limits; none the less they need, as said above, a clearing house for the exchange of ideas and a meeting ground for assembling their deliberative forces. This group of schools might, of course, jointly establish an organization with membership requirements suited to their several pleasures, but the schools concerned represent such a catholicity of sort, *i. e.*, are so varied in character and aims, that no single association with fixed regulations would be quite appropriate for their different purposes. Consequently we find that in American pharmacy seventy-five per cent. of the schools are closely affiliated and working in concert toward a definite goal, and twenty-five per cent. are unorganized (in so far as outside relationship goes), and hence have no common direction or end in mind. This may be a satisfactory state of affairs, but it is not in accord with pedagogical procedure in other professions and it does not appear to be in harmony with the best interests of pharmaceutical education. The whole situation seems to point to the Section on Education of the A. Ph. A. as the logical second coördinator in the field of drug instruction. If such be the case, the Section's mill has enough grist in sight to keep it grinding long after its present detractors have exchanged hammers for harps. Surely it is not too much to say that there still is need for a section on *Education*. But can we tack the appendage "and Legislation" to the title and still not have a misnomer? Suppose we investigate and see.

Every one concedes that pharmacy is burdened with more than its share of restrictive laws and revenue measures; every one admits that constant vigilance and unending activity must be maintained to keep the legal load from becoming

unbearably heavy; and no one claims that at present the drug business is adequately protected from beaurocratic dominance and further legislative action.

Any consideration of laws and measures such as here undertaken must start by dividing the general subject into two parts. The first part embraces all enactments and rulings emanating from federal agencies in Washington and affecting the entire country. The second part includes those laws and revenue measures which are formulated by the several state governments and affecting only the druggists of each state.

There are, loosely speaking, five types of federal enactments which are of peculiar concern to the drug business, of which three are carefully watched nowadays by all national pharmaceutical organizations. The three in question relate to revenue, narcotics, and alcohol. Fortunately for retail pharmacy the N. A. R. D., supported particularly by the A. Ph. A., is forever active in its endeavor to hold these within rightful bounds. The fourth type is a sort that affects not only the drug business but other interests as well, and is illustrated by price maintenance legislation. The national associations are active on behalf of such measures. The fifth and last type concerns pharmacy in the government service, and here we find that precious little effort is made by any organization to see that only salutary rulings and enactments are made. From the standpoint then of federal legislation, the section being championed in this paper finds a real function only in working in behalf of measures affecting governmental pharmacists, since all other sorts are faithfully even if not adequately taken care of by groups hereinbefore mentioned.

In peace times this work which the Section may do seems unimportant, but in the event of another war, when it would be too late, everybody pharmaceutically-minded would glorify its value just as they did in the fateful days through 1917-18. Between wars we pharmacists assume an attitude towards our brothers in the Army and Navy which is strongly suggestive of the peace-time neglect of the soldier which Kipling satirized in his Tommy Atkins ballad. We do this thoughtlessly, but even so there are several hundred patriotic pharmacists who have committed themselves to drug service in the military machine, and we are remiss in our obligation if and when we fail to put forth every legitimate effort to better their status and pay. There is, too, a selfish angle to the matter which will be cited if only to show that we all have a potential if not an immediate concern in the way the government views the services of drug dispensers. When, unhappily, this country participates in another war, there is not the slightest doubt but that conscription will be ordered at once. Each of us physically able will be forced into that kind of service which seems best fitted to our qualifications. Druggists will, for the most part, become military pharmacists and will be accorded the same dignity of position, same character of work, and same amount of wage as are allowed the pharmacists *now* enlisted. More weighty matters will engage the attention of our warrior chiefs when war is on than taking up the question of better rank and pay for pharmacists, and we will then find ourselves in exactly the same undesirable situation we faced seven years ago. Right now is the time to get a change made; right now when there is no haste, no chaos, and no feeling that force is the only master. If the section under discussion did no other legislative work in the next ten years than to obtain proper standing for pharmacists in military life, it would still have vindicated its title and its intentions. The author sincerely hopes that this responsi-

bility will be assumed by the Section and that it will never relax its efforts until justice is secured for Army and Navy pharmacists.

Turning from federal to state legislation we see but three types which are of principal concern to the druggist—revenue, education, and practice. (While each state has its own statutes on alcohol and narcotics, nevertheless federal control of these agents is absolute and may, for all practical purposes, be ignored in considering state ordinances and control.) Now revenue, education and practice are three very important matters needing much thought expended upon them and every possible safeguard thrown around them. At the present time the retail pharmacist must depend solely upon his state organization for protection, except in rare instances where a municipal, county or district association lends its support to the central body. Several of these state associations are very active, powerful, and effective, some of them almost rivaling the national organizations in membership and influence, but, on the other hand, several are pitifully weak, both in effort and effect, and may really be ignored in so far as legislative affairs are concerned. Between these two extremes are grouped the remaining state associations which are neither very powerful nor yet very weak. But even in those commonwealths where the strongest and most active organizations are in operation, there is still lacking a certain something which American pharmacy has always needed.

Up to a short time ago state associations have functioned as separate and distinct entities without any apparent regard for or interest in country-wide problems of common concern to them all. One obvious reason for such a condition was the previous lack of any coördinating agency for centering their thoughts and correlating their efforts upon matters of mutual concern. The House of Delegates was created mainly to supply this coördination; the Headquarters Building will provide additional machinery for affecting it; but there is still room for some group to supply legislative programs for the Delegates (acting for the state associations) to put into practice. Thought forces need to be at work not only on legal problems already upon us, but upon those which may logically be prophesied. The House of Delegates is a deliberative rather than a creative body, and it must, from its nature, remain so. It can and will examine the merits and pass upon the value of any proposals or programs submitted to it, but its functions are to deliberate and recommend rather than to experiment and create. Because of this necessarily limited ability, it needs to be supplemented by a close-at-hand agency which would provide it with material for examination and action. The state associations will, of course, play a large part in this introductory work, but even so other help will be valuable. Here again is an opportunity for the Section on Education and Legislation.

Following below are a few of the many matters of vital moment which should receive the attention of the Section:

1. What means can be formulated for hastening the enactment of nation-wide, pre-requisite laws? Heretofore this has been a problem left largely to each state for solution, when in reality it should have a central direction.
2. What arguments and what methods should be employed to secure a wider spread of the "ownership law?"
3. Is the assistant pharmacist justifying the position accorded him, and if

not, what steps should be taken to annul state statutes which permit his grade of license?

4. What effective plan can be evolved for putting a definite stop to the movement for consolidating state examining boards?

5. What are the merits or demerits of the varied proposals to limit by state laws the hours per day a pharmacist may work?

6. How can drugless drug stores and their sequels, prescriptionless pharmacies, be prevented legally from operating? What practical bill and what popular appeal will best guarantee this end?

7. Should the sort of practical experience nowadays gained by apprentices be a compulsory feature in the requirements for license? (A subject for N. A. B. P. action but for general discussion.)

8. Should there be undertaken a survey of pharmacy based upon commercial considerations? The Carnegie Foundation *might* survey and the Commonwealth Study *is* analyzing the scientific side, but no organization is, so far as known, contemplating a comprehensive study of merchandizing methods. Such a survey, undertaken by pharmacy's own agencies, would be a contribution of incalculable benefit.

9. Are schools of pharmacy responding to the needs of American pharmacy in respect to the merchandizing phases of the calling by adding to their curricula courses which, in scope and character, are calculated to train students successfully to manage a drug store? Does a school's obligation end with an implantation of scientific knowledge or does it extend to the commercial, and if to the latter, to what extent and degree?

10. Should pharmacy encourage or discourage a separation of its practice into two branches, the one largely apothecarial, and the other purely mercantile, each housed and managed separately?

These are a few of the problems pressing for solution, some of them now being worked upon by national associations, some having no concerted effort expended upon them by anybody, and all of them needing more analytical thought than they are getting. The Section on Education and Legislation, assuming that it becomes revived, could play a very helpful part in these questions of nation-wide import which require state-by-state settlement.

The author, as secretary of the above discussed section, wishes to avail himself of this opportunity to appeal to the members of the A. Ph. A. to prepare and present papers before the next general sessions of the Section at Des Moines. If this branch of the Association's work is important and needed, it must have for efficient functioning the interest and the active help of more members. A minimum of twenty-five papers, touching upon every phase of education and legislation, must and shall be secured by the next convention. The task will be made simple if to it is brought the help of JOURNAL readers. To them, therefore, this plea is directed.