there were several meetings of sub-committees. At a meeting of the sub-committee on essential oils we accomplished more in eight or ten hours than we could have accomplished in as many or more weeks by correspondence. The joint meeting of the sub-committees on Organic and Inorganic Chemicals showed great results.

Summarizing what I have said: The Pharmacopoeia should be revised in a similar way as in the past, but by a much smaller, paid committee which shall hold frequent meetings in various places to agree upon results, rather than by correspondence. This will make for more expeditious and efficient revision.

A. G. DuMez: In attemping to discuss this question I shall assume that the present organization for revising the Pharmacopoeia will be much the same as in the past. The Revision Committee may be reduced in size or even enlarged for that matter, and similar changes may occur with respect to the of sub-committees. In either event I think the following remarks will apply.

At its inception, the Pharmacopoeia was intended to be a book which would serve as a guide to the pharmacists in recognizing the more important drugs and in the preparation of the more important medicaments. That feature has been altered to such a degree that the Pharmacopoeia is now essentially a book of standards and it has been recognized as such in the Pure Food and Drugs Act. It, therefore, seems to me that we are justified in expecting that the Pharmacopoeia should be the last word with respect to accuracy on all matters which it purports to control.

From the criticisms which have come to my notice, I am forced to conclude that it does not completely satisfy these expectations with respect to chemistry. I believe, therefore, that the chemist has not been represented on the Revision Committee to the extent which he should have been, and I would suggest that he be given—that is the commercial and analytical chemist—a greater representation on the next Revision Committee.

Another agency which it seems to me should participate to a greater extent in the revision of the Pharmacopoeia is the Federal Government. There are various bureaus of the Government —the Bureau of Standards, the Bureau of Chemistry and the Public Health Service—which have facilities for conducting research work of the nature required and these have accumulated much valuable information in carrying out their routine work. I believe an effort should be made to make greater use of these facilities and secure this information which at present we can only obtain when it is published, and much of it never will be published.

SAVING TIME IN U. S. P. REVISION.

BY JACOB DINER.

It is assumed that the general method of revision by committees is not to be changed, and that the scope is to be to establish standards for drugs and their preparations.

The success of any undertaking depends to its greatest extent upon two factors: The underlying foundation and the organization back of it. This is as true of the business of pharmacopoeial revision as of any other enterprise.

Theoretically, there is a sound foundation upon which the structure of pharmacopoeial revision is to be erected, namely, the previous edition of the United States Pharmacopoeia. Practically, however, it is merely a pen and ink sketch, not even a well-developed plane, giving detailed specifications. I am happy to state at this time that one of the suggestions, which I intended to make, has already been put into execution. Chairman Charles H. LaWall has sent out a number of letters asking pharmacists, chemists, teachers and others, to make such criticisms and comments as they have to offer. This, indeed, is a very splendid beginning, and promises much for the new edition of the U. S. P.

I would further suggest that, inasmuch as the committees are appointed for a term of ten years, each chairman of a committee or sub-committee should begin revision work immediately after the publication of the last edition of the U. S. P. In this way the different committees would, at the decennial meeting, be in a position to consider actual revision matter instead of taking up most of the time of that meeting with committee appointments and, to no little extent, with political wire-pulling. In that way we could start with a solid and well-planned foundation

and, no doubt, with some definite plans and specifications for the superstructure and also for the interior decorations and adornments, if any there be.

The next matter requiring careful consideration is the organization which is to carry out the work. In the past, geographical distribution of committee-membership was considered of great importance; it is to some extent, but not in the way of distributing patronage and for the purpose of paying political and personal debts. In the past this has led to a sacrifice of efficiency on the altar of diplomacy. It is an established fact that a committee, as a rule, is no stronger than its chairman. He can make or mar the success of the entire committee. The qualifications for chairmanship should be neither geographical nor political. Ability and willingness to do the work himself and to obtain ready and sympathetic coöperation from his fellow-members on that committee should be the only or, at least, the chief qualifications for chairmanship. The chairman should be a man of convictions yet amenable to reason, and imbued with only one object, that of obtaining the best possible results from the work of his committee. He must be open to conviction, free from personal motives and prejudices and a conciliator of no mean degree. Furthermore, the members of any given sub-committee should be, geographically, as close to each other as can possibly be arranged from the material at hand. Considerations and discussions by correspondence are tedious, time-consuming and most unsatisfactory from many points of view. If the members of a sub-committee are within easy traveling distance of each other they could readily meet and accomplish in one day's discussion more, and with greater satisfaction, than could be done in a month of correspondence.

Another important matter is the selection of the members of the committees and sub-committees. It is essential to pick the right men for each committee. In the past there has been a perpetuation on committees of certain men whose principal qualifications were the ability to talk and write a great deal on subjects with which they had, at best, but a mere "speaking" acquaintance. It is not always the man who reads ten papers, or reads the same paper ten times at ten different meetings, who is really qualified to act on a scientific committee. Much knowledge can be gleaned for parade purposes from thumbing the leaves of a dictionary and cheap renown for erudition may be acquired by glibly quoting the presumable happenings in pharmacy in ancient Babylonia. We have allowed too much freedom and, most important to them, too much advertising publicity to these pseudo-scientists. Let us dig up the men who really are capable to perform this scientific and important work in a real scientific manner; the men who are willing to do this work for the glory and the satisfaction of the deed itself and not for its advertising value and who, moreover, are willing to do this work promptly and without bias. Then we will have a new United States Pharmacopoeia which will surpass anything of its kind and which will be in the hands of the profession within a reasonable time after the Pharmacopoeial Convention.

ABSTRACT OF DISCUSSION.

WILBUR L. SCOVILLE: I can endorse the sentiments of Dr. Diner on this proposition; there is one other factor, however, I would like to mention in regard to the saving of time. The saving of time does not mean the hastening of time. The first pharmacopoeia was issued within a year, I think, from the time preparations for its publication were begun; the other editions were not long delayed until the pharmacopoeia was enlarged, and the time for completion increased until on the 8th revision something over five years were required. Then the question of time became an important incident and my understanding is that the committee decided that, if there were a larger number on the work it could be done more promptly because there would be more men to do it. The committee was increased from 25 to 50 and it took six and one-half years to get it out.

The real issue, to my mind, is not so much getting the pharmacopoeia out in a hurry, but letting the pharmaceutical and medical world know when it is coming. There was uncertainty for several years relative to the time when the present edition of the U. S. P. would come out. This information is important for a number of reasons, not the least the one of conservation and prevention of financial loss. However, we can afford to make haste slowly; I do not think six years is any too much time for the revision. I was made to realize the need of time in the revision of the National Formulary. I had to edit that work and thought I was going to get out a book with very few errors. I was very much chagrined when, during the first three or four