SECTION ON PRACTICAL PHARMACY AND DISPENSING, AMERICAN PHARMACEUTICAL ASSOCIATION

THE PHARMACOPOEIA AND NATIONAL FORMULARY REVISIONS.*

BY MRS. ST. CLAIRE RANSFORD GAY.

With the distribution of the first copies of the new United States Pharmacopoeia and National Formulary must come a sigh of relief from those who have worked so long and so hard on the revision of these books.

That there is a decided improvement in the books can not be denied and perhaps one of the points most noticeable in this respect, is the prescribed allowance for variation in strength, in certain preparations through which, even if the preparation does assay less than the official strength, it is still acceptable as long as it comes within the prescribed deviation. This is a wise and just decision and was made no doubt to give the pharmacist the same opportunity to escape punishment, as is enjoyed by the manufacturing chemist, who through the kindness of the chemical rubric may market a product, not perfect (but which, with a little more expense, might have been made so), yet in spite of the variation it is immune from the law. It was time for this change and its value is appreciable.

Another point which is impressive is the great decision in the wording of the tests. This is one of the most important parts of the book, and should not allow any indecision on the part of the chemist applying any of them. The book thus becomes a standard and may be considered an authority instead of being discarded as has been frequently done, when any delicate work was being carried on.

The question of deletions and additions will be, of course, always a matter of individual opinion, and no doubt this, as well as the controversy over the word cubic centimeter, helps to delay the publication of the book.

It is not probable, though, that any of the omissions made by the committee will seriously affect the doctor, or the pharmacist, and if your pet preparation has been discarded, and another one substituted for it, the cheering thought comes in the fact that this is the day of the "five-drug" doctor, and you can easily make him see the folly of prescribing something which, not being official, is liable to be different everywhere it is bought. Among the commendable additions are the instructions on sterilization. These are concise enough to form a part of the every-day régime of even the department drug store, but, no doubt, simple as they are, will be discarded by many, except upon the visit of the inspector.

Transferring U. S. P. preparations to the N. F. makes no material difference, as they are still official, and, outside of the ordinary confusion experienced in such cases, will in no way disturb anyone. It is only reasonable to suppose, however, that, as it has taken the savants six years to make the book, that the pharmacist will be given a reasonable length of time, in which to become acquainted with all of the many wonderful changes, improvements and additions that have become official, before being punished for his ignorance. Perhaps the thing that has made this book famous, is the time that has been consumed in its revision, and while it seems ungrateful to touch on this point, after all the gratuitous labor expended

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by the workers, it is just upon this point of gratuity, that a word should be said, and for which a reward should be made to those who have sacrificed time and care to the compilation of the books.

Therefore the subject resolves itself to a question of economics. Is the United States Pharmacopoeia of a commercial as well as scientific value to the United States Government? Undoubtedly yes, then as with everything else that the government considers of value, it should be paid for by the government, in proportion to its intrinsic value, and the men that give their time and brain-work to the making of these books, should be paid by the government, a salary that would permit them to devote all of their time to the work in hand, have a suitable library, an up-to-date laboratory and every facility that would permit the publication of the book in sections, so that the pharmacist, and the government as well, would not be deluged with the entire new book at the end of six years, and then have in hand a mass of material that the wholesaler has discarded as *passé*. It is safe to say that forty percent of the pharmacists do not know all of the changes of the last U. S. P. Why? Simply because their particular work was limited to a few things in the book, but if the U. S. P. had been given to them in sections, there is no doubt that as a news item, either in a journal, or in a government pamphlet, it would have been read by degrees, digested and given a practical tryout at the time of publication, and when the entire book had been published in this way, it would have been no surprise to the pharmacist at large, but simply a compilation of official facts.

To be honest, is it logical for the pharmacist to have to learn in a few months what it took four or six years to compile, and is it really worth while when the book is official in this case only four years after publication? It is not and would not be the case, if ideal, or even reasonable conditions prevailed for its publication. There is sure to be a movement in the matter of government direction, if not ownership, in the near future, and the man nearest at hand in Washington will be the one chosen to direct this work, regardless of his fitness for the position, or the sentiment of the pharmacists at large. Would it not be more dignified, then, to ask that a department of pharmacy be established by the government, the men to be selected from the various pharmaceutical societies, a proper laboratory be given to them, a decent salary be paid to them and make it worth while to give their undivided attention to the compilation of the books? From a commercial point of view, it is entirely rational, and from a scientific point, it would be the culmination of the dreams of every theorist, who wished to make practical those dreams, which under the present conditions must always remain theoretical fancies. And, after all, it is only through the dreams of yesterday that we have the facts of to-day, and if we can only make enough of these theories scientifically accurate, we shall soon restore pharmacy to the rank of a profession and remove the present stigma of pure commercialism.

ABSTRACT OF DISCUSSIONS.

OTTO RAUBENHEIMER: Six years is entirely too long to wait for the Pharmacopoeia; but it was not too long this time, because the work had to be done carefully, to be carried on by correspondence, and to be verified. Every test in the Pharmacopoeia has been verified. Every formula has been proven and the preparations are in possession of the committee.

E. F. COOK: The question of whether we should have a laboratory where this work can be done or whether it should be done through a large committee, and one more experienced is

open for debate and will be discussed for many years until it is finally settled. The point that I wish to bring out is, that although when we met in conference a great deal of work was accomplished, this would have been impossible if there had not been two or three years of previous work done, in which the experimental data were gathered and the preparations tested.

C. H. LAWALL: The conference, after all, is merely the clearing house at which to settle many points; but the conference itself would not help, unless the preliminary work were done. I have had more intimate association with the work on inorganic chemistry than with any other part of the work of the committee. In that connection there was not a test, description, or paragraph of the Pharmacopoeia that was not verified under my supervision, and also by correspondence with other members of the committee. Chemistry is not an infallible science, because it is practiced by persons who are liable to variations in their methods of working. We have tried to expedite the work as much as possible and use every care. The long time elapsing has been largely due to the fact that most of us had to work at times convenient to us, apart from our ordinary vocation.

L. F. KEBLER: There is no question that the conference is the place where a final decision should be reached. I have also thought of the possibility of the government's taking hold of the Pharmacopoeia. I am not so enthusiastic as I was ten years ago, however.

It is very important to sift every point, and scrutinize every word and every mark of punctuation. Another thing—the Pharmacopoeia should be unified. One part should not controvert another. This is a book for court work; and when it comes to a standard to be considered in court, it is absolutely necessary that the standard be inflexible. Some courts will construe it to a nicety, and not make any deviation—even though it works a hardship.

H. V. ARNY: I believe that eventually the actual work of revision will be carried out in the National Capitol. There will be found the real workers and the real laboratory. Behind them we must have the Board of Directors, who will be the experts, the men in the laboratories throughout the country. If the routine work were done in the central bureau, and this Board of Directors had the final decision, I think the problem of revision would be solved.

JOHN M. FRANCIS: There has been a note of pessimism in the words of some of those who have spoken. The Pharmacopoeia is a child of our own, a very considerable number of the auditors present have had something to do with the revision of it; so it is ours, and we feel that we can refer very frankly to its limitations and failures. I do not, however, approve of this note of pessimism that seems to have crept into the discussions. The value and efficiency of work of this kind should be judged, not from the viewpoint of theory, from the standpoint of idealism, but from the practical standpoint of what it accomplishes. To illustrate what I have in mind, I would ask you to compare the last revision with similar pharmacopoeias developed in European countries. We all respect the work of European scientists, but I should like to ask whether there is an educated pharmacist in the United States to-day, who would be willing to substitute the pharmacopoeia of any other civilized country for the one that has been in force here, or for the one that is coming out. Our present Pharmacopoeia will be generally accepted throughout the world as being superior to any other. There is hardly any science or art in the world so complex as that of medicine and pharmacy. There is not a physician in the United States to-day, who can infallibly diagnose all cases of disease. Medicine has a wonderful amount to accomplish before it reaches the stage where it can be pronounced exact or infallible. The same is true of the art of pharmacy. I believe that the Pharmacopoeia should continue to be revised in the future, as it has been revised in the past, because it has gained the hardy admiration of everyone associated with the manufacturing and purveying of medicine. Among manufacturers, I include the man in the corner drug store. I maintain that the Pharmacopoeia is not a work of law. It is not a book of standards by which the pharmacist shall be judged and, perhaps, hailed into court. It is a splendid thing that it should serve this purpose to some extent; but I maintain that it is a book that is mainly intended for the guidance of the pharmacist in the manufacture and dispensing of remedies, and not to serve as a legal code.

MRS. GAY: I am sorry that I have been somewhat misunderstood. With regard to verification of the tests, I did not mean to insinuate that the tests as given in the Pharmacopoeia were not verified. That would be absolutely foolish; but some of them are not accurate. Prof. LaWall brought out that fact, and also the point that the revisers could not be expected to give their time if it encroached on their daily work. Now the government is making use of the brains

of the country, and why does it not help to pay for the use of these brains? You would not expect to give your time as a teacher, or as a maker of chemical tests, for nothing; and I do not see why these men should not be paid a salary by the government. If the salary is adequate, they can give their undivided time and attention to this work.

SUGGESTION FOR THE TENTH REVISION OF THE U. S. P.*

BY F. B. KILMER.

The following suggestion as to method of securing a coöperative revision of the next revision of the Pharmacopoeia is offered:

That the Committee on Revision who acted for the Ninth Decennial Revision shall, in advance of the Pharmacopoeial Convention, meet and assign certain problems connected with the revision of the Pharmacopoeia to such associations and organizations as they can enlist in the work. For example, assay processes, the purity and strength of pharmacopoeial articles, to colleges of pharmacy, the American Pharmaceutical Association, chemical associations, associations of manufacturers, and other like bodies, asking them to coöperate in going over the processes and standards of the Ninth Revision, giving constructive suggestions for the Tenth Revision.

This would at once secure the active coöperation of both organizations and individuals, who, in the natural course of events, await the publication of the Pharmacopoeia, wherein they find difficulties and differences in which they would have been of assistance had they had an opportunity to work on the same, in advance. It would also give an opportunity to have the purity and strength of pharmaceutical articles tested in numerous laboratories, and by this method a vast amount of work would be done in advance of the real revision of the Pharmacopoeia.

It would seem probable that the associations above named, and others which might be listed, together with individual laboratories, would be very glad to take up portions of the Pharmacopoeia which might be assigned to them and give the Pharmacopoeial Committee the benefit of their work.

In the plan outlined it is not intended that the Pharmacopoeial Revision Committee shall assign any part of its work relating to the scope of the Pharmacopoeia and other matters which can only be worked out by the Committee on Revision by itself, and in which they need no aid.

It may be urged that the above method would in a measure be irregular and illegal. This may be met by stating that it is not intended that the work so assigned would be considered as official or binding upon the Committee of Revision, but only handed to them in concrete form for what it is worth. It may also be urged that the present Committee of Revision has not authority to make such assignment. This is true, but there is nothing to prevent it from making such an assignment, which shall be suggestive only, and the Committee of Revision of the Tenth Edition of the Pharmacopoeia will be at full liberty to use all, any part, or none of the results of the work which may be submitted to them.

It is believed that a program of this character, systematically arranged and carried out, will also have a tendency to facilitate and speed up revision work.

It is possible that a similar assignment of problems could be carried out by the Committee of Revision of the National Formulary.

*Read at the meeting of the New Jersey Pharmaceutical Association, 1917.