

THE SCIENTIFIC PHASES OF PHARMACOPOEIAL REVISION.

BY A. R. L. DOHME.

The time is opportune for a discussion of pharmacopoeial revision for we are about to embark upon the said revision next year. The Scientific Section is a proper source of criticism and discussion of said revision, notably the scientific phases thereof.

As I see the work of revision and have seen it for the 25 years that I have been connected with it, it is not carried on in a business-like enough way, both as to its executive and scientific departments. The fellow is the most popular who always agrees and pats people on the back, and the fellow is usually the most unpopular who ventures to offer suggestions or criticism. The fellow who has the courage of his convictions, however, has the satisfaction of having done what he considers his duty when he ventures upon the field of criticism.

U. S. P. Revision needs a budget on scientific work as well as finance. Some definitely thought-out, thoroughly discussed and evolved plan to work up to in its work. This can never be done so long as the Committee is as cumbersome and unwieldy as fifty or even twenty-five. With such a large committee it is, in the last analysis, usually one or at most three men and minds that determine the policy and principles of the revision and much of its detail.

My idea is a committee of three with power to name experts and assistants to any extents needed and all paid fully and amply for their work, and they to devote all of their time to their work. It should be a duty and not an honor to be on the revision committee in any capacity.

As to the scientific phases I should suggest an advisory board of not over ten besides the Committee of Three; said advisory board to serve without other pay than their expenses and to be subject to call of the Committee, one of whom shall be its chairman in charge of the work of revision.

This committee, with its advisory board, should have at hand a complete library and literature of work done in all the lines of scientific work pertaining to the pharmacopoeia. A librarian or secretary should cull the journals and arrange each piece of scientific work under the proper heading of the U. S. P. With this in hand the Committee should decide after continuous consideration and discussion of the subject, covering probably several months, during which time all need not be present all the time, upon a plan and program of revision of each item in the U. S. P. and as well upon certain general principles of science that are fundamental for the work. These principles should cover such questions as nomenclature, atomic theory and weights; new vegetable drugs and organic chemicals to consider and study for admission; new inorganic substances to consider for admission; deletions and a careful consideration of same before action; new discoveries in science as they affect the revision; new processes that may affect the revision, etc., etc.

The pharmacopoeia revision committee has, I fear, too often followed instead of led in the matter of the adoption of new ideas or discoveries. Its own lack of inertia, and its own excessive corporosity has probably been at fault.

Before beginning the actual detail of revision as embraced in experiments and processes, the Committee should map out general plans for each class of substances and submit these as the basis of the work of the expert or subcommittee in charge of that class of substances. These plans should go further than generalities and should touch upon and affect specific items whenever the information and conclusions of the Committee justify them in doing so. This will develop uniformity of viewpoint, principles and practice in the book rather than divergence or contradiction in viewpoint, etc. Why not have the Committee of Three made up of one medical, one chemical and one pharmaceutical expert, do the deciding and general work with the details and experiments to be carried out by experts and assistants employed for that purpose. Part of their duty should be to study the field of new remedies and drugs of all kinds that seem possibly fit for admission to the U. S. P. and have their own clinical experiments made if necessary.

In particular it seems that there are many vegetable drugs notably of South America that deserve to be studied as to their therapeutic value. It would seem that it would be well and desirable to have a research committee as one of the subcommittees of the Revision Committee to whom should be assigned the duty of studying the botany, pharmacy and therapeutics of a certain number of such new vegetable drugs with an eye to their possible adoption

in the Pharmacopoeia, notably those that have been adopted in other pharmacopoeias. This research committee should be made up of qualified research chemists well paid for devoting all their time to revision research work and should work continuously year in and year out.

If the Committee is small and the experts employed on full time they might well and advantageously work in one research laboratory belonging to the Pharmacopoeia instead of having this work done, as it always has been, in the various laboratories of the country. As it is done now, conditions as to apparatus, methods of work, climatic conditions are different and in consequence not necessarily or probably uniform. A book of standards like the work of the Bureau of Standards should be worked out under standard and uniform conditions. This could be done at Washington in the Bureau of Standards under supervision of men selected by the Pharmacopoeial Convention but all working together under one roof and hence the same conditions, or in Philadelphia if deemed preferable. I am quite well aware that Philadelphia will protest against removing revision headquarters from Philadelphia, but a national book and a national standard should be national and have no local coloring or feeling about it.

WHY DOES THE PHARMACOPOEIA?

BY WILBUR L. SCOVILLE.

Habit is a factor with organizations as with men. The habit may be small and of little consequence, but it betrays an attitude nevertheless. It also helps in making for influence.

The Pharmacopoeia shows some habits which are neither essentially "bad" nor of great importance, but which are nevertheless significant. Perhaps they have been regarded as too trivial to consider. Nobody has seemed impelled to call attention to them. Probably it isn't good manners. But I have felt inclined to forget my manners and to criticize some of the habits.

The first habit to which I object has to do with certain titles. The habit of entitling tincture of tolu as *Tinctura Tolutana* and syrup of tolu as *Syrupus Tolutanus*, for instance.

The Latin writers tell us that *Tolutanus*, *a*, *um*, is an adjective, and so must agree with the noun *Tinctura* or *Syrupus*.

That silences us laymen, but does not convince. For it is not an adjective in its application. It is a noun. The English title is right—Tincture of Tolu. But any Latin student in High School who would translate *Tinctura Tolutana* as "Tincture of Tolu" would be immediately called to account.

The Latin title for Tolu is *Balsamum Tolutanum* and even this is translated "Balsam of Tolu." Consistency would make the tincture title *Tinctura Balsami Tolutani*, and if we abbreviate the construction and let "Balsami" be "understood" the title would still make Tolutani agree with the (understood) Balsami and the title would be *Tinctura Tolutani*. That is, at least, logical.

Where did this thing start, anyway? We take a substance, called Tolu or Tolu Balsam, or Balsam of Tolu, as you prefer, and we make a tincture of it. Then we are told that this substance, from which we have prepared a tincture is not a noun, but an adjective, and the proper title must deny its objectivity. I make bold to ask why? It is many years since I studied Latin, and I was not very proficient in it when I was under its tutelage. But if one is to know, one must ask. So I ask by what right Tolu is denied its noun privileges in Latin, and accorded them in English? Some of our Latin books make Tolu a Latin indeclinable noun. Then why not adopt that? But to say that a substance is an adjective quite confuses one. I cannot account for it, except as a habit.

Another habitual title is *Tinctura Aloes* (Lat. sing.) which is translated Tincture of Aloes (Eng. plural). Is there a plurality of Aloe in the tincture? It is all the more singular since Aloe is a juice, and we rarely speak of juices when applied to a single kind.

It has taken the pharmaceutical world a generation to get over saying "Syrup of Squills," after a patient emphasis on the point by our pharmaceutical editors and teachers. But wherein is "Tincture of Aloes" any better than "Syrup of Squills?" Or if "Tincture of Aloes" is a correct or preferable title, then why is not the Latin *Tinctura Aloarum* to agree? For the Latin and the English do not now agree—thereby again confusing our High School scholars.