

PHARMACEUTICAL STANDARDS, PAST AND PRESENT.*

BY EDWARD KREMERS.

It has long been a practice in this country to relegate preparations that were not regarded "worthy" of a position in the United States Pharmacopoeia to the National Formulary. In not a few instances the pharmacist has continued to demand a standard when the physicians on the U. S. P. Committee of Revision demanded the deletion of certain preparations. The pharmacists' demand arose in part from the fact that physicians continued to prescribe preparations discarded by the Sub-committee on the Scope of the Pharmacopoeia. Likewise, popular medication makes demands for pharmaceutical standards, quite irrespective of regular medical practice, a demand which the pharmacist may not ignore.

To this well-known situation that has always been with us, the rearrangement of the drug market, notably the restrictions on the use of sugar and the scarcity of glycerin as a sugar substitute in pharmaceutical preparations, has made the present problem of standards a very perplexing one. If to this there be added the statement made by a well informed chemical manufacturer that more than one-half of the chemicals of the new chemical factories, that have sprung up like mushrooms since the war, have to be rejected because not up to the standard of the U. S. P.; if we further call attention to a circular letter issued by a crude drug firm to all state agricultural experiment stations, asking the sick and the lame, the maimed and crippled, in fact all who can not take part in the important economic problems of this nation, to use such time and strength as they possess in the gathering of wild medicinal plants and to cure them to drugs without giving more than a hint as to what to collect and not even a suggestion as how to cure; if we thus add inexperience and unguided ignorance to the more rational attempts made at the solution of a problem that is so grave under normal conditions, we may well expect that standards are going, provided they have not already gone, a-glimmering, if you will pardon this inelegant but highly characteristic expression.

Such being the situation, not only in this country but throughout the world, the entire problem of standards may seem highly inapropos at the present time. Yet the contrary is the case. That this is being realized is clearly shown by a number of recent events. Not only has the work on standards been continued by the Government, by such organizations as the Council of Pharmacy and Chemistry of the A. M. A. and by various pharmaceutical organizations, but it has been receiving the special attention of such bodies as the American Association of Drug Manufacturers and the American Association of Pharmaceutical Chemists and is to receive further consideration when the Association of American Food and Drug Officials meet in this city somewhat later in the month.

Not many years ago this Association appointed a Committee on Unofficial Standards. One of the special problems of this committee was to look into the pharmacopoeial history of such chemicals, vegetable drugs, and galenicals as had been dropped from the U. S. P., but had not been given a place in the N. F. It

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was planned at that time to readopt one of the old pharmacopoeial standards or a revised modification thereof. No doubt, many of these revived standards will find their way directly or indirectly into the N. F. Some of them may already be included in the latest revision thereof.

There are two phases of work on standards that deserve special mention in this connection. One of them has already been referred to in connection with papers that I have presented to this section, both of which had to deal with what I have chosen to name "A century of the U. S. P., 1820 to 1920." One of these had to deal more particularly with the galenical oleoresins of the U. S. P., the other with the Liquors of the same official guide. (Exhibit of proof of Dr. Du Mez's manuscript on Oleoresins.)

In this connection it possibly should be pointed out that more than a year ago, the American Association of Drug Manufacturers appointed a Committee on Standards, and that this Committee has shown its appreciation of the historical significance of standards by beginning its work in the Lloyd Library. Unquestionably this work will prove valuable to the members of the organization that has undertaken the task. To what extent it will prove beneficial to pharmacy at large remains to be seen. A thorough monograph of each class of preparations, giving the literary references to all information to be had about each specific preparation in that class, is certainly a requisite to all intelligent and scientific discussion and research looking toward its improvement, also to the establishment of a present standard, even if that standard is to be one that was laid down in the past.

The other phase of standards to which I desire to direct your attention, however briefly to-day, is represented in the reproduction of standards, past as well as present, by means of the card form for the dissemination of information. Aside from the general information, each item is to receive a separate card, and each standard under that given item a separate card. Thus information on the Liquors may be supplemented by another card on Arsenical Liquors, this in turn by a card on Fowler's Solution, and this finally by numerous cards giving a fac-simile reproduction of the text of each standard, foreign as well as domestic, together with references to the special literature on that standard. (By way of illustration the card for Liquor Potassii Arsenitis, U. S. P. 1890, was exhibited.)

Without going into the merits and defects of the card system as a method of distributing and collecting encyclopaedic information, it may suffice to point out that an actual beginning is being made and, what is equally important, it is a beginning to which any individual may make a contribution or as many contributions, as he sees fit. Let us hope, therefore, that the beginning already made may prove acceptable and that its acceptability will be demonstrated by numerous contributions from others.
