Mr. Mayo: I move that the Secretary cast the ballot for Mr. Se Cheverell for Secretary.

(The motion was seconded, put and carried, and the Secretary cast the ballot.)

Mr. Se Cheverell: I make the same motion as to Mr. Berg for Associate.

(The motion was seconded, put and carried, and the Secretary cast the ballot.)

Mr. Fletcher: I move we adjourn.

Mr. Mayo: Before we adjourn, we should present the new officers. It affords me pleasure to present Dr. Weinstein, a man who represents true pharmacy, and who is a very pillar of pharmacy in the State of New York. Gentlemen, whenever we find pharmaceutical gatherings, Doctor Weinstein is there. He has a large coterie of friends in the New York retail drug business. Dr. Weinstein has been a worker in pharmacy and for pharmacy for a great many years. I have pleasure in introducing Doctor Weinstein, the new Chairman.

Mr. Osseward: Doctor Weinstein, it gives me pleasure to give you the Chair, and I can only say that I will be pleased to assist you in every way I can to make the session next year a good one.

Doctor Weinstein: Gentlemen, I almost lost my breath at hearing that great introduction delivered by your worthy President. I don't know whether I deserve all that praise, but I will try to do something next year and try and select the right men to assist me. I promise you I will do the best in my power.

Mr. Mayo: The mere fact that a man is young is no bar to his usefulness. Mr. Se Cheverell referred to the fact that he was young in the Association. It is a fact that we have young men in the Association, and they have been of great assistance to us. We have had good young men from Denver. Nitardy was one of the best officers we have had in this Section. Mr. Se Cheverell is a young man, and I have great pleasure in introducing him as your new Secretary.

Mr. Se Cheverell: All I can say is I will do my very best.

Dr. Weinstein: Then I can bank on that. Is there any further business before this Section? If not, a motion to adjourn will be in order.

Dr. Arny: I move we adjourn.

(Motion seconded, put and carried.)

(Adjourned at 6:07 P. M.)

## THE NEW PHARMACOPŒIA AS AN EDUCATIONAL PROBLEM FOR THE PRACTICAL PHARMACIST.\*

JOSEPH WEINSTEIN, PHAR. D.

The ninth edition of the U. S. Pharmacopæia will soon be completed. The committee of Revision has spared no effort to make this book represent the last word of the pharmaceutical science.

The nomenclature, the macro- and microscopical pharmacognostic descriptions of botanical drugs, the chemistry of substances are minutely described; the modus operandi in preparing galenicals, the purity rubrics, the assay processes, each and

<sup>\*</sup>Read before the Section on Practical Pharmacy and Dispensing, San Francisco.

all will bear testimony to the scientific character, and to the up-to-dateness of the work.

The new book will soon be placed in the hands of the pharmacist, unto whom it is the law by which he is to abide, to its commands he must strictly adhere and with all its requirements he is obliged to comply. Thus the decennial revision of the Pharmacopæia becomes a compelling power on the pharmacist to keep abreast of the times, for punishment is in store for him for failure to comply with the changed requirements.

Unique indeed is in this respect the position of the pharmacist. There is no such a thing as compelling any other professional to decennially change his ways. If a physician be desirous to take up present day methods, good and well, but no law will interfere with the medicus, for instance, for remaining loyal to the old-fashioned arsenic treatment in leucæmia and for his not resorting to the somewhat more successful benzol medication and X-ray treatment. Not so with the pharmacist. "Thou shalt not go any longer by old methods; by the new and latest abide"—is the dictate to him, and he must do so.

This order of things, whereby the druggist is to be kept from getting rusty and is to be prevented from becoming fossilized; this peremptory fiat on the pharmacist to imbibe the last and best in his science and this lifting pharmacy upwards, though accepted by all as a matter of course and very gratifying to all true lovers of professional pharmacy, is somewhat perplexing to me, causing me some uneasiness and placing me in the category of questioners.

I am inclined to ask, whether the rank and file of the pharmacists are sufficiently prepared to take up the advanced methods prescribed by the Pharmacopæia. Being fully aware that in many a state not even the minimum two-year course in a pharmacy school is required for license to practice pharmacy, I feel like asking what is at present the percentage of pharmacists in the United States fully able to meet the high expectations of them? For, could one, to whom no laboratory training was given, be expected to apply chemical tests and to perform assay processes for determining the alkaloidal strength of some of his galenical preparations? Or could one, who has never seen a compound microscope be expected to examine his drugs microscopically?

Truly, were I to be called upon for an expert opinion on the liability of the pharmacist, I would declare, that whenever the requirements of the licensing board are not sufficiently high and do not measure up to the knowledge exacted of him by the Pharmacopæia, the pharmacist can not be answerable for his shortcomings, for he is not fully responsible.

By giving this opinion of mine I do not wish to convey the impression that our standard is too high, and that something is to be done to retard the progress of pharmacy. Far be it from me. The disagreeable truth is told with the object of calling attention to the necessity of action for improving the status of pharmaceutical education, and especially to help those who, through no fault of their own, are behind the times, but if given the opportunity, would be only too happy to add to their store of knowledge.

With this object in view I would advocate, firstly, that a standard be established for pharmaceutical education in the United States, below which no board shall have the authority to go, and which should be sufficiently high to make a phar-

macist fully prepared for his work, as that preparation is understood in our day. When this is agreed upon, boards of pharmacy, especially in the states that have no college prerequisite, shall not license a pharmacist on the strength of his theoretical knowledge only, consisting of written answers to the examination questions, but submit the candidate to a thorough practical examination as to his ability to test the purity of his drugs, to do analytical work, etc.

Secondly, for the benefit of those members of our profession, who became such in years gone by, when the requirements were low, or who acquired their calling in sections of the country where no college training was required and where the boards were easy, but who, nevertheless, I dare say, are numbered by the thousands, the facilities of additional learning be granted, by the establishment of special pharmacopæia courses.

Let the schools of pharmacy throw their doors wide open for all those who desire to get information on everything pertaining to the Pharmacopæia, without any preliminary requirements and at hours convenient for the retail druggist. The courses should be conducted on practical lines only, such as testing for impurities, assay processes, etc., entirely eliminating theoretical instruction. Courses of that kind would be productive of great good, and they would help to do away with the anomalous state of affairs, where ever-increasing knowledge is required of the pharmacist without giving him an opportunity to acquire same. This is a great promising field for our educators, of whom many are also members of the Revision Committee and who are familiar with the theological lore, that when Moses legislated for the Israelites in the wilderness, he clearly perceived the unpreparedness of his contemporaries to adopt his laws, his code of ethics, but he proceeded with his work, having in mind the fact, that his own generation would die off, and aiming at their descendants and at generations to come, who would be more fit for his teachings.

Let us hope our members of the Revision Committee have not aimed that far, for the thousands of pharmacists who are not fully up to the present day requirements are not quite ready to die; they wish to live and to compete with us, and they can, through the agency of additional work taken up at special courses, become good and useful members of our great pharmaceutical fraternity.

## DISCUSSION.

Dr. Weinstein: Now, I want to mention that my object in this paper was to bring out some discussion on this subject. I came to the idea that it is not exactly required of a practicing pharmacist that he shall take up a special course in a college of pharmacy, that he should know all about the theory, just the same as it is not required for a worker in a drug store to know the formula of every preparation that is sold. Thousands upon thousands of pharmacists would be glad to take up practical work in a college of pharmacy if opportunity would be given to them. Not long ago one college in New York City provided a special course in materia medica, and I know those who attended were very glad of it, some of those druggists who have been prosecuted by the Board of Pharmacy in the City of New York. The trouble is that the average pharmacist has never been to school. I am speaking of those who are not college graduates. They don't know. For them it is terra incognito. If you show a man once how the thing is done, he will be able to master it and be able to make tests of preparations that he handles in his store. If the colleges would think of this and open courses so that the pharmacists could take up special training in testing preparations, I think both the colleges and the pharmacists would gain considerable.

Dr. Arny: In helping the discussion along, I heartily commend all that Dr. Weinstein has suggested. I wish it were possible to do in this country today as Prof. Tschirch of Berne has done. When the Swiss Pharmacopæia came out, he arranged a six weeks' summer course in Switzerland, in the city of Berne, where the pharmacists got together. I believe he had as many as a hundred there. They came together and had a six weeks' vacation, and at the same time learned the new pharmacopæia. Dr. Weinstein has spoken of the institution with which I am connected, and I would like, for the benefit of our friends who are connected with other colleges, to mention what we are doing in that direction. Last year Dr. Mansfield started several courses. He had forty-five men and women. The courses were so successful that this year we have decided to start an evening course on the subject of the new Pharmacopæia. There shall be, first of all, the laboratory work in the pharmaceutical laboratory. But we feel that will not be so attractive. Then the assay classes. Then Dr. Diekman and myself are going to give an hour lecture once a week on the changes, chemical and pharmaceutical, in the Pharmacopœia. We feel sure it will be appreciated, for the reason that Dr. Mansfield's course was so appreciated last year. These are simply extension courses. A fee is to be charged by the college, and I think an exceedingly reasonable fee. I think this should be done by every college of pharmacy in the country. In state university towns it may be different, but I strongly advise the city colleges to do this thing. In New York, there is no danger of any of our boys taking the course, because they are required to be graduates in pharmacy, but we are going after men who have been in the business twentyfive years. When Dr. Mansfield first spoke of it, I didn't think much of it, but when I saw the character of the men, men forty and fifty years old, men who are taking it, then I considered it valuable. Ex-presidents of associations were going there, and it is a wonderful thing, and I think something in the way of a vacation course might be given in the state

You have heard of the night courses in Cooper Institute. They have a night course in Cooper and made progress last year. We feel we ought to do the same. It is done merely from the standpoint of helpfulness. I strongly commend the idea to all colleges.

Mr. Osseward: There is another point. With us the pharmacists cannot come before the Board unless they have graduated from a college. They must have attended the two years' college course. When they come to us they answer that they cannot go to school. They have families to support and it is impossible for them to go to school. If those men could have a little assistance I think it would be helpful.

Dr. Anderson: I believe one point has not been taken up. We are also preparing a course similar to that outlined by Dr. Arny. We feel that the retail druggists of Kings County, where our college is situated, are entitled to this service. Our institution was founded and built up and has always been conducted and controlled by the Kings County Pharmaceutical Society. There is another service feature we are taking up, one which was recommended by our president in his last annual address. This is an instance where a trustee has ideas that have not occurred to most of the faculty. President Smith recommended in his annual address that we extend this course to prepare pharmacists for positions in the United States Army or Navy qualifying them for work required in this service. So we intend to incorporate that particular feature in addition to preparing the older pharmacists to do work with reference to the new Pharmacopæia.