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Section on Pharmacopoeias and Formularies

Papers Presented at the Sixty-Second Annual Convention

## MINUTES OF SECTION

The first session was called to order promptly at 9:30 a. m. on Wednesday, August 26, at the Hotel Pontchartrain by Chairman Cook, who in opening the meeting referred to the unavoidable absence of the Secretary, Prof. Needham, on account of sickness in his family, and stated that he had requested Mr. Thum of Philadelphia to act as Secretary pro tempore.

The Chairman then delivered his address [printed in September, 1914, issue] and on motion of Prof. Remington it was referred for publication.

The Secretary's report was read and, on motion, it was accepted and placed on file.

Chairman Cook then read the following letter from Dr. Nestor Tirard, the Medical Editor of the British Pharmacopæia:---

74 HARLEY STREET, W., LONDON, ENGLAND, August 8th, 1914. E. Fullerton Cook, Esg., Chairman Section on Pharmacopoeias and Formularies, American Pharmaccutical Association.

Dear Sir: In answer to your letter of July 7th, relating to the British Pharmacopœia, as it was not in my power to send you an advance copy I had hoped to forward you a brief review of the new issue. Now I have to inform you with regret that owing to the grave inconvenience which might result from the introduction of a new standard at the present time, it Very truly yours has been decided to postpone publication.

NESTOR TIRARD, Medical Editor of the B. P.

Prof. Remington then addressed the Section upon the subject of the Pharmacopœia IX, saying :---

"Mr. Chairman, I do not think it is necessary to present a report at this time in detail of the Pharmacopœia. It is very remarkable that the British Pharmacopœia revision, which has

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been coincident to that of our own Pharmacopœia, should have progressed up to the present time.

"I was in London a year ago and Dr. Tirard invited me to meet him—who might be called the Chairman of the Committee on the revision of the British Pharmacopœia. He called me in to see the new British Pharmacopœia. The new features in it are very few. It seems so strange when I think of a year ago and being with Dr. Tirard. I looked at the modest office. It was something like our own pharmacopœia. One had to stop and think a few moments and make a few comparisons.

"I will tell you what has been done, and I think it is of far more importance than it ap-parently seems. The British Pharmacopæia and the United States Pharmacopæia get together on one practical idea which affects the doctor and the pharmacist equally, and that is to have a table of abbreviations for everything. Abbreviations! Now what do we mean by that? I think you all must realize that in the reading of prescriptions we do not know sometimes, as we read a prescription, what the doctor means. Abbreviations are the real language of prescriptions. No doctor in the world ever writes out now in full a prescription either in Latin or in any other language, particularly in Latin, with all the terminations, correctly. They say life is too short to do that. Every doctor abbreviates. Then why not have a standard and let 'pot. iod.' stand for potassium iodide, and 'sod. brom.' stand for sodium bromide. Now we want to make uniform throughout the English speaking countries this system of abbreviations. In other words, prescription language we want to get together on, and have uniform. It is going to take time. An English pharmacist reading a prescription of an American physician when travelling, will know just exactly what he means and the abbreviation can mean nothing else when it is once established. Nothing of this kind has ever been done before making uniform these abbreviations. The idea, as I developed it to Dr. Tirard, took some little time. He said, 'That is one of the most desirable things we can have.' Then I called his attention to the fact that we can also use these abbreviations for shop furniture. Take, for instance, the question of the relief-clerk; a relief-clerk going to another store is confronted with different abbreviations. Potass bromid,—that is very easy,— potassium bromide, and so on. There is no uniformity now. The manufacturers of labels have their own abbreviations. Each manufacturer of these glass labels has his own idea of how these things should be abbreviated. It is a little practical matter that has not been systemized and brought into line. Here is a little thing that science is getting into, the little matter of abbreviation of the words that are going to be used. We are going to have an abbreviation for any item a physician prescribes, if the doctors still continue to write prescriptions, although I am sometimes doubtful if they will. But never mind; the drug business will survive nevertheless, but we do want to see when we go into stores, a uniformity in the language that is used in designating any articles which are used in medicine.

"I will now come back to the actual work of the pharmacopœia. A very important part of the book which is usually neglected by the pharmacist and the physician. The tables,—you are familiar with them, no doubt,—in the back part of the book, the part called the appendix. This appendix is really the most important part of the book because that is the standard for standardizing the standards; volumetric solutions, tests, and the tables,—everything which is there is really the most important part of the book, because they are the standards which regulate the standards. The front part of the book and the text part of the book are the only parts you are interested in. It has what you want, paregoric, and syrup of squill and other good things you want. But in order to start the work, that it may go on systematically, the committee must have the standards upon which they base their work before them all the time, so we begin at the end of the book; that is, we begin with the appendix and get at all the mistakes that are in that appendix, and then when that is done, the completed appendix, upon which the rest of the book depends, is in the hands of everybody. That part of the book is in the hands of the printer, and I hope in two weeks we will be able to send that out, so it will form the basis for the work.

"We have heard a good deal about the binding of the book. One man has written a letter with regard to binding the book, in which he says the book is all falling to pieces. Well, I asked him how long he had had it. He said he had had it twelve years. I said, 'What use did you put it to?' He said, 'Oh, my pharmacopœia is in use all the time. I have it on my prescription counter.' I said, 'Has it been dusted with permanganate and nitric acid once in a while? Didn't the boys drop it on the floor twice a day on an average?' He said it was a good deal that way. A Pharmacopœia twelve years in use, with that kind of treatment, and yet it is beginning to fall to pieces. I said, 'You would begin to fall to pieces too if you had been knocked about that way for twelve years.'

We are going to the it together with four bands. These bands are glued on with glue which has passed inspection and is free from germs and absolutely aseptic. It is to come in around each one of those and to be glued down that on the side (illustrating). The committee hope, if the book is thrown on the floor, on one corner, that the other three bands will hold; that if it don't hold on that corner, then the other three bands will hold it together.

"This idea about the pharmacopœia not being well bound! Why, the book is one of the best bound that has ever been put forth. This criticism is only from people that are hypercritical. I can show you plenty of books that do not get half the use that the pharmacopœia does that have all gone to pieces. "But I will tell you one thing about the binding that is of concern to you; the worst kind of binding now for anybody to buy for any kind of book is sheep. Sheep binding will not stand because we do not get the leather we used to. The process that is used for tanning will cause it to weaken sometimes inside of a year; at least it becomes tender.

"Now look at this book; solid and unyielding. Where does the strain come? Just on that little bit of a crack, hardly a line in length. The whole thing depends upon that little hinge. I sincerely hope and believe, if we do not have a war, that our pharmacopeia will be out after all within a reasonable time. I think in six months we can see it through the press and get it out. But here! There is the dummy; there is the book only for size; don't look inside because it is all mixed up purposely, but there is the style of binding that I hope you will buy for your own good. It is not made of leather; it is called buckram; that is a cloth especially made, far more durable than sheep and at half the price. This will be on account of the binding, intermediate in price; between the sheep and the cloth. I will pass that around and let you look at it. That is the dummy; it has been adopted merely to show the size of the book and the printing on the outside, and the binding, but I think that binding will outlast two sheep copies anyhow, and, of course, there is the cloth copy (indicating); the printing will be different; the outside will be different. It has been approved by the Board of Trustees and that will be the outward appearance of the new book. This printing will probably be different, so as readily to distinguish one from the other. That will be the color of the buckram, and this will be the color of the cloth. The blue will be the cheaper of the two, and we will have the sheep for those who want it. Now the committee has tried, and it is going to keep on trying to satisfy everyone and every suggestion that has been made on the pharmacopeeia we would like to consider, but that is not always possible.

"Now there are two other things,—there may be three; one is the whiskey question, whether it is to be taken up by the pharmacopeia or whether it is not, and I cannot tell you yet what the decision will be. But the decision is growing among a great number of the members of the Association to drop whiskey and brandy from the pharmacopeia entirely and not involve the pharmacopeia in any litigation in the future; drop it entirely. And I think Dr. Wiley is probably quite willing to do that. He has been the great champion of pure foods and pure drugs, but for my own part, I do not hesitate to tell every body what my own opinion is as Chairman of the Revision Committee; I think it was a mistake to put whiskey and brandy into the pharmacopeia Eighth Revision.

"I do feel very greatly relieved, and we must all feel relieved at the prospect of getting out that book. And the people who have been crying about the pharmacopœia all this time do not realize that they will not be the happiest bunch when that book comes out, but the happiest bunch will be the members of the committee and the poor chairman who has been the punching-bag for everybody, but who can then lie down and get a good sleep and get up and eat a good breakfast.

"I haven't anything to say with regard to the book itself because it will be so soon in your own hands that you can see for yourselves. I am only bringing to you here a part of the make-up of the pharmacopæia and to tell you the condition of the revision at the present time.

"The only other question is which of the two organic assays which have been proposed will be accepted, and as to that matter, I am going to have a meeting with Dr. Rosengarten, who is the Chairman of the committee of chemicals and organic chemicals. I met Professor La-Wall who was to have been here, but Mrs, LaWall met with an accident and broke her arm and he is compelled to remain in Philadelphia with his wife. We have Mr. Raubenheimer and Dr. Lyons, who is with us at this meeting—God bless him—is one of the committee. Now he was very ill, and he is the man that has given us those tables. He is the mathematician of this committee. I believe Dr. Lyons lives, eats and drinks figures, and I could not be surprised when he gets up in the morning some of these hot days if there is not an imprint of the pharmacopœia on his pillow. But never mind all this; I want to thank him and every other member of the committee. The bow is unstrung and we are so nearly through that I can indulge for the first time in the last five years in some happy thoughts.

"There are other members of the committee here who want to say something, and I am taking the time, but I do hope sincerely that we will have no such set-back as that of the British Pharmacopæia. I hope you who are gathered here to hear about the pharmacopæia will share the attitude and the feelings of the Revision Committee.

"There have been some differences in some of the committees. The members differed and squabbled and fought and lost their temper once in a while. But I know them all. When anybody says anything nasty about anybody else, it goes in the waste-basket, because I won't print anything that is derogatory, or which reflects upon any member of the committee. Some things have not been published, but you can easily see if the doors are open to let in personal feeling and personal views it would not he a valuable book. It is not gotten up to express anybody's personal view, but if in the course of time the members have any difficulty, we have got to straighten it out. We must have harmony and co-öperation or we could not get along. We have had it and we are nearly through, and I do not think there is any liability of any very big trouble. We have been very strenuous about expressing our opinions, but after all, I think we will have a pharmacopœia that will meet with the approval of nearly everybody."

CHAIRMAN COOK:--"I am sure we have been very much enlightened by this informal and interesting report of the Chairman of the Revision Committee. It will now be in order to hear any discussion on this question of pharmacopœia. All questions that anyone wishes to ask, no doubt the Chairman of the Committee will be glad to answer or explain any point."

PRESIDENT BERINGER:--"I do not think the druggists or many of the critics have any idea at all of the volume of work that has been necessary in making up the standards that go to make up the pharmacopœia. I find difficulty in reading them all, and I guess most of the members do."

MR. THURSTON: ---"I would like to ask Prof. Remington a question. In the old pharmacopœia we had a number that was pasted in, --an official number for each copy. I would like to know if some method could not be devised to publish an official certificate in each copy so that it would be taken as authority in cases at law. I have had cases where they would guestion the pharmacopœia. For instance, they would say, 'How do you know that is the Pharmacopœia of the United States?' Well, I wasn't on the committee to prepare the pharmacopœia; I didn't help write it, and there was no way for me to swear that that was absolutely the Pharmacopœia of the United States. There should be some method, if possible, so that in cases of that nature that we could prove that the book that we testified to was the Pharmacopœia of the United States."

was the Pharmacopæia of the United States." PROF. REMINGTON :--"I certainly appreciate the remark by my friend Prof. Thurston, and this is what he refers to, I think; this is the old pharmacopæia,--that little label there; that coupon we call it; that little coupon there on that page. Now, that was never gotten up with the idea of proving the identity of the pharmacopæia, but that idea originated with Dr. Charles Rice in the previous pharmacopæia, of pasting a coupon in the book which simply read 'The Pharmacopæia of the United States of America; official copy,' and then it is numbered serially, and they are all taken up in issues. For instance, there is 'A,' meaning 20,000 copies of the pharmacopæia, ordered first; Scries B, meaning the next 10,000, or Series C, the next 10,000, or 5,000, as the demand tapered off. There was one published, and I will say that the same publisher will publish the new pharmacopæia that published the last. These coupons are used between the printer and the publisher so that the coupons here were furnished at the last revision and now they will be furnished by a Board of Trustees. The Secretary, Mr. Whelpley, will furnish the coupons for this edition, and he has charge of those. He issues 20,000; he sends to the publishers 20,000 and they send 20,000 to the printer to paste in the book at the time that issue goes out, and they are all numbered from one to 20,000. Now when Series B comes, then it will be the second issue. "As to the point of Prof. Thurston, I do not see how the use of a label or the use of any-

"As to the point of Prof. Thurston, I do not see how the use of a label or the use of anything in the book itself would be regarded as evidence that it really was the pharmacopæia, if a man wanted to cheat,—if he wanted to get up something to imitate the pharmacopæia, or leave something out, or put something in, and the lawyer wants to know if that is really the pharmacopæia."

MR. HOSTMANN:—"That question was raised in New Jersey some years ago in a suit in one of the lower courts. The lawyer wanted evidence that that was a copy of the pharmacopœia. The Judge was about ready to throw the case out. Then there was an agreement made between the two attorneys, and the court decided that the only way that that book could be admitted as evidence was to secure an attested copy from the Library in Washington,—I believe it is the Library,—the Congressional Library of the United States, and the State's attorney went to Washington, and there they produced a copy of the pharmacopœia and it was endorsed on the inside on the second page 'Registered in the office of the Librarian of Congress at Washington.' There was an official seal there and the Librarian's signature that that was a true copy of the United States Pharmacopœia. That was only in the lower courts there, but I believe that is the regular procedure if you want to use the book as testimony you will have to have it attested by the Librarian at Washington, that it is a true copy of the book. I imagine that is the only way it can be done."

MR. RAUBENHEIMER:—"I can see it will be an immense benefit and it will certainly increase the weight of the pharmacopœia in court if the statement was made on the title page that this book has been made the legal standard of the United States. I think such a statement would certainly have some weight in court; not only in court, but it will have weight in the other service. I believe there are still some men scattered throughout the country, perhaps in New York, perhaps in this city, that don't know the U. S. P. and the N. F. has been made the legal standard. I believe that would be a pretty good idea. It might also increase the weight by having perhaps the stars and stripes or an American eagle or something like that on the outside. It would impress probably the public as well as the pharmacists, and even the lawyers."

The report of the Committee on the U. S. P. was read by Prof. L. D. Havenhill. [Printed in September issue.]

CHAIRMAN COOK:--"I would suggest that as the Pharmacopœial Revision Committee are going to have a meeting this afternoon, that a motion be made for the receiving of this paper and that it be referred to that committee for consideration." It was so ordered.

paper and that it be referred to that committee for consideration." It was so ordered, PROF. REMINGTON :---"I just want to say a word. There was a point brought up by Mr. Havenhill about expensive apparatus. The committee have considered the matter very carefully. For instance, on electrolytic methods, which cannot be performed by the pharmacist;

the committee realizes that this book now is the standard for the United States; it is the ine committee realizes that this book now is the standard for the United States; it is the standard under the food and drugs act, and anything like dropping from the pharmacopœia a decisive and valuable test like the electrolytic test, and give it up because the clerks in the drug stores cannot get the apparatus, or because the students in the colleges cannot use it, is not to be considered. We cannot afford, with a book that is authority for the United States, to consider that all we have got to think about is the student. The pharmacopœia was not made and is not made for the student. It is not its function either to cater to the retail druggist. It is, though, the prime object that the test shall be as simple as possible; and the pharmacopœia cannot be limited in scope, now that it is the standard for the United States, to the non-education of some clerk in a drug store.

to the non-education of some clerk in a drug store. CHAIRMAN COOK:-"The next order of business is the report by Prof. C. Lewis Diehl, of the National Formulary Committee."

REPORT OF THE COMMITTEE ON NATIONAL FORMULARY.

## C. LEWIS DIEHL, CHAIRMAN.

The efforts of the National Formulary Committee throughout the year have been chiefly directed toward the perfection of the final text. This has been reproduced as edited copy in the Committee Bulletins, and has included the majority of articles proposed for Part II, which have been prepared by the Committee on Unofficial Standards.

A set of formulas and articles proposed for the book have also been prepared in manuscript form so that Part I (formulas) and most of Part II (drugs or chemicals) are practically in readiness to turn over to the printer when the contract is awarded.

A conference of the Committee has been called, to extend over-possibly two days, following this meeting of the Association, and it is expected that the final manuscript will be perfected at that time.

As bids have already been received by the Committee on Publication for the printing and binding of the book and the contract will no doubt be awarded by the Council before the close of this meeting, it can be confidently expected that the National Formulary, Fourth Edition, will make its appearance within the next six months and certainly not later than the appearance of the U.S.P.

On motion it was referred for publication.

CHAIRMAN COOK:—"The next report is one by Mr. George M. Beringer, Chairman of the Committee on Unofficial Standards. [Printed in November issue]. You have heard this re-port. If there is no objection it will take the usual course." MR. HYNSON:—"May I ask if you, in including all this work in the National Formulary, regard it as the proper place for it?" MR. BERINGER:—"It seems to me in answer to that inquiry, Mr. Hynson, that it is abso-lutely necessary to protect the National Formulary as a legal standard; that it should in-clude proper tests and define its standards and its formulas. We have always believed they were there, but they are not there. It is up to us to supply them. We have discussed it back and forth in the committee and we have all come to see the necessity of its being there. "The Food and Drugs Act says The National Formulary. You cannot amend the food and drugs act of the nation and the food and drugs act of the various states by simply changing the name; you must retain the tille of your book."

the name; you must retain the title of your book.

the name; you must retain the title of your book." MR. HYNSON:---"I meant as a supplemental title." MR. BERINGER:---"The main title of the National Formulary must remain." MR. RAUBENHEIMER:---"In a way I believe Dr. Hynson is right. A National Formulary, as such, must retain the present title inasmuch as the pure food and drugs law simply states the standard in the U. S. P. and the N. F., and so on. In time, I have no doubt, this committee on standards will standardize all things." MR. HYNSON:---"The idea is brought out by Mr. Raubenheimer. I would like to say, after a great deal of thought and consideration--I have to think over things very hard and very long to get a good understanding of them--that I don't know any work that the American. Pharmaceutical Association has done that is so creditable and is so much in use, and that