

# COMMITTEE REPORTS

## REPORT OF THE GENERAL SECRETARY.\*

TO THE PRESIDENT AND MEMBERS OF THE AMERICAN PHARMACEUTICAL ASSOCIATION:

*Year Books.*—Since the last convention the fifth volume of the Year Book has been issued and distributed. Though having the benefit of reviews in all the leading pharmaceutical journals, the sale to non-members has been small. However, a number of libraries now purchase the book each year and it seems likely that this demand will grow.

*National Formulary.*—The sales of the National Formulary, as expected, fell below those of the preceding year, but 6523 copies were sold in 1917 and yielded an income of \$10,973.06. The total sales of the N. F. IV, June 1, 1918, amount to 23,481 copies, with a gross income of \$41,083.50.

A detailed report follows:

### A. RECEIPTS AND EXPENDITURES ON ACCOUNT OF NATIONAL FORMULARY IV. JANUARY 1, 1917, TO DECEMBER 31, 1917, INC.

#### *I. Expenditures.*

J. B. Lippincott Co.—publication.....	\$ 2,804.63	
Louis Hesse—labels.....	17.45	
U. S. P. Convention—use of U. S. P. text.....	25.00	
Transferred to N. F. Revision and Research Fund.....	13,903.67	
Total.....		\$16,750.75

#### *II. Receipts.*

#### *Summary of Quarterly Reports of Sales.* (Midland Publishing Co.)

March 1, 1917:

	Number sold.	Price per copy.	Amount.
Bindings.....			
Muslin.....	1,777	\$1.605	\$2,852.085
Buckram.....	863	1.935	1,669.905
Buckram interleaved.....	39	2.875	112.125
			4,634.115
Credit on exchange to Philadelphia College of Pharmacy....			16.50
			4,617.615
Freight.....			12.43
			4,605.18
Remitted to Treasurer.....			\$ 4,605.18

June 1, 1917:

	Number sold.	Price per copy.	Amount.
Bindings.....			
Muslin.....	1,164	\$1.605	\$1,868.22
Buckram.....	459	1.935	888.16
Buckram interleaved.....	22	2.875	63.25
			2,819.63
Freight.....			53.06
			2,766.57
Remitted to Treasurer.....			2,766.57

\* Presented at the Sixty-sixth Annual Meeting, A. Ph. A., 1918.

Sept. 1, 1917:

Bindings.	Number sold.	Price per copy.	Amount.
Muslin.....	562	\$1.605	\$ 902.01
Buckram.....	214	1.935	414.09
Buckram interleaved.....	10	2.875	28.75

Remitted to Treasurer..... 1,344.85

Dec. 1, 1917:

Bindings.	Number sold.	Price per copy.	Amount.
Muslin.....	969	\$1.605	\$1,555.245
Buckram.....	439	1.935	849.465
Buckram interleaved.....	5	2.875	14.375

2,419.085

Overpayment on 49 interleaved copies..... 140.875

2,278.210

Freight..... 21.75

Remitted to Treasurer..... 2,256.46

Total remitted to Treasurer on account of N. F. IV during 1917..... \$10,973.06

B. SUPPLEMENTARY REPORT.

RECEIPTS AND EXPENDITURES ON ACCOUNT OF NATIONAL FORMULARY IV.

JANUARY 1, 1918, TO JULY 25, 1918.

I. Expenditures.

J. B. Lippincott & Co.—Publication.....	\$ 205.00
Journal A. Ph. A.—Reprints.....	6.50

211.50

Transferred to National Formulary Revision & Research Fund 4,059.24

Total..... \$4,270.74

II. Receipts.

Summary of Quarterly Reports of Sales, March 1 to June 1, 1918, inc.  
(Midland Publishing Co.)

March 1, 1918:

Bindings.	Copies sold.	Prices.	Amount.
Muslin.....	460	\$1.605	\$ 738.30
Buckram.....	93	1.935	179.95
Buckram interleaved.....			

Totals..... 553 918.25

Remitted to Treasurer..... \$ 918.25

June 1, 1918:

Bindings.	Copies sold.	Prices.	Amount.
Muslin.....	516	\$1.605	\$ 828.18
Buckram.....	126	1.935	243.81
Buckram interleaved.....	4	2.875	11.50

Totals..... 646 1,083.49

Remitted to Treasurer..... 1,083.49

## JOURNAL OF THE C. NATIONAL FORMULARY IV.

Summary of Copies Printed and Bound by the J. B. Lippincott Co. to July 1, 1918.

	Muslin.	Buckram.	Interleaved.	Total.
Series A.....	4,500	5,000	500	10,000
Series B.....	5,700	4,100	200	10,000
Series C.....	4,000	1,000		5,000
	14,200	10,100	700	25,000
Series D. Printed but not bound (in stock in sheets at J. B. Lippincott Co.).				
r Total.....				3,000

### D. SUMMARY OF COPIES RECEIVED AND SOLD BY THE MIDLAND PUBLISHING CO.

#### Copies Sold.

Year.	Muslin.	Buckram.	Interleaved.	Total.
1916.....	7,993	7,279	487	15,759
1917.....	4,472	1,975	76	6,523
1918 (1/2 Yr.).....	976	219	4	1,199
	13,441	9,473	567	23,481
Total sold.....				
Complimentary copies distributed.....		47		47
Stock at Midland Publishing Co., June 1, 1918....	266	588	167	1,021
In transit from Lippincott to Midland, July 1st....	500			500
	14,207	10,108	734	25,049
Totals.....				
Less copies credited to Midland and counted twice (see Dec. 1, 1917, report).....			49	49
			49	49
Corrected totals.....	14,207	10,108	685	25,000

### E. TOTAL RECEIPTS FROM NATIONAL FORMULARY IV.

July 1, 1916, TO June 1, 1918, inc.

(Remitted to Treasurer.)

During the year 1916 .....	\$28,108.69	
During the year 1917 .....	10,973.06	
During first half 1918.....	2,001.75	
	\$41,083.50	

### F. ACCOUNT OF NATIONAL FORMULARY III FOR THE YEAR 1917.

Receipts—Sales and Collections.....	\$8.10	\$8.10
<i>Expenditures.</i>		
Postage.....	\$ .49	
Insurance.....	\$2.75	
	\$3.24	
Total.....		\$3.24

### G. STOCK OF NATIONAL FORMULARY III.

(Stored at Lloyd Library.)

Cloth bound copies.....	149
Cloth interleaved.....	34
Sheep bound.....	9
Sheep, interleaved.....	28
	220
Total.....	220

H. ACCOUNT OF PROCEEDINGS AND YEAR BOOKS.

I. Receipts:		
Sales Jan. 1, 1917, to Dec. 31, 1917, inc.....	\$ 46.80	
Remitted to Treasurer.....		\$ 46.80
Supplementary:		
Sales Jan 1, 1918, to July 1, 1918.....	48.10	
Remitted to Treasurer.....		48.10
II. Expenditures, Jan. 1, 1917, to Dec. 31, 1917:		
<i>Year Book, Volume 3:</i>		
Stoneman—Publication.....	2,448.61	
Postage.....	8.37	
Total.....		\$2,456.98
<i>Year Book, Volume 4:</i>		
Eschenbach—Publication and mailing.....	2,893.14	
Labels, postage and expenses.....	19.37	
Total.....		2,912.51
Supplementary:		
January 1, 1918, to July 25, 1918:		
<i>Year Book, Volume 5:</i>		
Eschenbach—Publication and mailing.....	2,893.57	
Lloyd Library—freight.....	17.64	
Postage, labels and expenses.....	33.87	
Total.....		2,945.08
III. Stock of Proceedings Stored in Lloyd Library:		
Cloth bound.....	3,312 (copies)	
Paper bound.....	1,369	
Unbound.....	2,617	
IV. Stock of Year Book Stored in Lloyd Library:		
Vol. 1, 1912.....	265 (copies)	
Vol. 2, 1913.....	466	
Vol. 3, 1914.....	457	
Vol. 4, 1915.....	313	
Vol. 5, 1916.....	323	

I. ACCOUNT OF BADGES AND BARS.

Jan. 1, 1917, to Dec. 31, 1917, inc.

I. Receipts from sale of Badges.....		
Remitted to Treasurer.....	\$24.25	
		\$24.25
II. Expenditures:		
A. H. Fetting—25 Indianapolis Bars.....	21.25	
A. H. Fetting—Special order, back bars.....	7.60	
Total.....		\$28.85
III. Stock on Hand, July 1, 1918:		
Gold badges.....	11	
Gold bars.....	102	

## JOURNAL OF THE

## J. SUMMARY OF RECEIPTS BY MONTHS.

Jan. 1, 1917, to Dec. 31, 1917.

Months.	Badges and Bars.	Proc. and Year Book.	N. F. III.	N. F. IV.	Misc.	Total Remitted to Treasurer.
Jan.....		\$ 8.00				\$ 8.00
Feb.....	\$ 8.00	4.00	\$6.75			18.75
Mar.....		2.00		\$4,605.18		4,607.18
Apr.-May.....		3.60				3.60
June.....		7.20		2,766.57		2,773.77
July-Aug.....	16.25	8.00		1,344.85	.50	1,369.60
Sept.....		4.00	1.35			5.35
Oct.....		6.00				6.00
Nov.....				2,256.46	2.00	2,258.46
Dec.....		4.00				4.00
Totals.....	\$24.25	\$46.80	\$8.10	\$10,973.05	\$2.50	\$11,054.71

## K. SUPPLEMENTARY.

## SUMMARY OF RECEIPTS BY MONTHS.

Jan. 1, 1918, to July 1, 1918, inc.

	N. F. IV.	Proc. and Year Book.	Total Remitted to Treasurer.
Jan.-Feb.....	\$ 918.26	\$ 7.20	\$ 925.46
Mar.....		13.60	13.60
Apr.-May.....	1,083.49	4.00	1,087.49
June.....		23.30	23.30
Total.....	\$2,001.75	\$48.10	\$2,049.85

Respectfully submitted,

WM. B. DAY, *General Secretary.*

## REPORT OF THE COMMITTEE TO INVESTIGATE "SHORT-TERM, CORRESPONDENCE, SUMMER, AND OTHER SIMILAR COURSES IN PHARMACY."\*

In preparing this report I have divided the whole number of institutions into two general groups, those that are members of the American Conference of Pharmaceutical Faculties and those that are not. The first group presents no difficulties, but handling the second group is an entirely different matter. In the United States there are seventy-one colleges registered or accredited by New York and we know of twenty-one other institutions or individuals giving instruction in pharmacy. Making allowance for some that we very likely have not heard of, the grand total must be well above ninety.

I have classified these non-Conference schools that give short courses by states, giving such specific information as we have been able to obtain, including name and location, length and number of courses in a year, tuition and some other statistics. From the correspondence and other literature I have been able to summarize the information and draw some general conclusions that I have embodied in the report.

## CONFERENCE SCHOOLS.

As far as it was possible to determine there are only eight of the forty-four Conference Colleges that give any sort of short course. A few others reported that they had done so at some time in the past, but had discontinued the practice. Four of the eight, the College of Pharmacy

\* From report of a committee appointed by the American Conference of Pharmaceutical Faculties, read before that body and also before joint meeting Section on Education and Legislation, A. Ph. A.; National Association of Boards of Pharmacy, and A. C. P. F., Chicago, 1918.

of the City of New York and the Colleges at Michigan, Wisconsin and Nebraska Universities, conduct summer sessions in which they give courses the same as or similar to regular courses. At Nebraska the courses are regular in every particular. Michigan's catalogue states that there are "no formal entrance requirements" and that these courses "are open to all those who are qualified to pursue them with advantage. Credit may be applied toward a degree at any subsequent time, when the student becomes a candidate for a degree." Wisconsin's catalogue says "Students who do not desire to become candidates for a degree need not comply with the entrance requirements. They may register in any course or courses the work of which, in the estimation of the instructors in charge, they are able to carry with advantage. Credit toward graduation, however, will be given only after regular matriculation." Of the work, they say, "These courses are given primarily for the benefit of apprentices employed in drug stores, who wish to avail themselves of the opportunity to do university work in practical pharmacy." At the New York College the entrance requirements are the same as for regular courses and no credit whatever is given toward a degree.

Three schools, Kansas and Wisconsin Universities and Highland Park College, Iowa, conduct correspondence courses through their extension departments. Some of these are for those who wish to become registered pharmacists and some are technical courses and under certain conditions may count toward a degree. The course at Kansas "is designed for prospective students and apprentices," that is, "to help students to prepare for a pharmacy course" and not as a preparation for State Board examinations. The course is not controlled by the School of Pharmacy but is entirely under the supervision of the Correspondence School of the University.

The School of Pharmacy at Corvallis, Oregon, offers what they call a "Vocational Course, requiring two years of High School work for entrance and not leading to a degree. It runs through two years (length of year not stated, presumably the same as the regular year) and is intended for drug clerks who possess the amount of practical experience required by the majority of State Boards of Pharmacy and who wish to review the work preparatory to entering upon the examination demanded for registration as licensed pharmacists."

Highland Park College in Iowa gives what it entitles the "Best Possible Short Course—Six Months." Some paragraphs from their catalogue will give the desired information better than any comment of mine. "Anyone who expects to become a registered pharmacist can not do better than to complete a course of not less than a total of fifty weeks leading to a degree and a diploma. The pharmacy graduate is broader and better educated because of it. But there are many who have had store experience, but lack the technical knowledge necessary to meet state board examination requirements. Circumstances are such that they are not able to attend college. For the benefit of these persons, this course is designed. It allows them to get the best education possible in a short time and be prepared to pass their state board examination. There are no entrance requirements to this course other than an education equal to eight grades of the public schools. Each student does laboratory work and elects the subject which he needs. We do not recommend the course as a substitute for a regular course in pharmacy. No short course, however practical, is a satisfactory substitute for a complete thorough course. Many students have been able to pass their state examinations after three months in this course, but students are urged to complete as much as possible because of the great value of the course to them. The advantage of this course over 'plugging' courses, which consist largely of quizzing, is apparent. The tuition is much less, time required no longer, and the work done in the course is of great practical value to the student. He is prepared for examination as a fully registered pharmacist."

It goes without saying that the short courses given by the few institutions that also give regular courses are superior in most particulars to the typical short course school. The staff of teachers is larger, there is a real equipment in the way of laboratories and library, the atmosphere must be somewhat different. In fact, beginning with the absolutely regular work given by some of the Conference colleges there is a gradual shading through this group into the characteristic short course given by the typical "plugging" school.

#### NON-CONFERENCE SCHOOLS.

The non-Conference institutions, twenty in number, are distributed throughout fourteen states, as follows: Arkansas, Iowa, Kansas, Maryland, Minnesota, Nebraska, Oregon and

Wisconsin, one each; California, Georgia, Illinois, Indiana, Missouri, two each; Michigan, three. As you notice, the states are in the central part of the United States except for two on the Pacific coast, one on the Atlantic and one in the South. I have no explanation to offer as to why they are where they are. It occurred to me that some one would be sure to raise the point that they would be most numerous where the standard colleges had very high entrance requirements or large tuition, or both, but that is not the case. They are to be found in those states but in no greater numbers than in other states. One of the number is registered and one accredited by New York and some others give courses of two, three and four years leading to degrees, leaving sixteen that give nothing but the short course.

These schools are hard to classify, each is a law unto itself. They vary in length from six weeks to nine months, the greater number being about three months. Some run continuously and students enter at any time but they are more often timed to have students ready for the periodical Board examinations. The course is then repeated two or three or four times a year. In many cases, individuals are allowed to continue in attendance until they become registered. That alone is the end sought. The smallest tuition is twenty-five dollars for three months, the highest, one hundred and twenty dollars for three months. The schools have been in existence thirty-two years, twenty-four years, twenty years, many, from five to ten years. Almost nothing is said about teaching staff. Sometimes there are two or three, more often one. Entrance requirements, if mentioned at all, get only passing comment. There are none, they say, or, they are only such as are required by the Board in the state in which they wish to take the examination, or, they require a common school education. As the director of a standard college aptly expressed it, "the fee constitutes about the only entrance or scholastic requirement." It is impossible to determine the number of students attending. Much is said about the proportion passing Board examinations but little else. It is fair to presume that there is a goodly number. These people are not in business for the fun of it. One institution, twenty years old, has had eleven hundred students; an individual teaching private classes has had as many (number of years not specified); one, twenty-four years old has had sixteen hundred students; another, seven hundred in eight years; one correspondence school claims to have had twelve thousand students since it was incorporated in 1885. Statements as to equipment are conspicuous by their absence. Blackboards and charts are mentioned several times, the expression "laboratory work" appears once (what sort and how much is left to our imagination), there is one and only one mention of a "well equipped pharmaceutical laboratory."

Some of these do not call themselves schools and such sent no printed literature but simply wrote that they conducted private classes. Possibly these should not be included in this report, but since we were to investigate "short-term, correspondence, summer, and other similar courses," I have so interpreted it. When an individual says that he has had more than eleven hundred students in his classes it can hardly be called tutoring. One of these letters, written by the secretary of an accredited college, I want to quote almost in its entirety. "Regarding your inquiry the College of Pharmacy only conducts the regular two term degree course. However, the writer has had considerable experience with special short course instruction and will start a class about July first. Just finished with both Missouri and Kansas class and have several preparing for the Okla. exam. next month. My price is seventy-five dollars for the course, but if you fail to register, which is not at all likely, with the first two months I will help you again with my next class until you register for that fee. You will need a new U. S. P. or Arny or Remington Pharmacy and a chemistry. I have all the drugs for identification and give you the necessary lab. instruction. Had eleven pass the last Mo. and seven last Kans. all with their first course of instruction." Another, written by a man who is Dean of an accredited college, says: "My course consists of about one hundred and twenty-five hours of the following subjects: Chemistry, Materia Medica, pharmacy, toxicology, the pharmacopoeia and pharmaceutical arithmetic. My price for the course is fifty dollars. I have taught over eleven hundred students in my private course. My recommendation is the success with which my pupils have passed the different Board of Pharmacy also the Naval and Army examinations."

It is evidently a lucrative business; witness the beautiful engraved stationery upon which some of these people conduct their correspondence. One of these letters indicates considerable versatility on the part of the author. Besides conducting a ten weeks' class four times a year during two or three evenings a week from seven to nine, his stationery sets forth that he is an

"analytical and manufacturing chemist, analyses, formulas perfected, toxicological work (whatever that may be), expert testimony in legal cases, consultation on chemical problems, preparations duplicated"—all this and more engraved on his letter head.

While one's sense of humor is uppermost, some statements are exceedingly ludicrous but, taken seriously, they are pathetic, even tragic. A man from Arkansas says, "Now it is not necessary that you should have studied Pharmacy before entering school. I have had but few men who have ever seen a school of Pharmacy before entering mine, and really I would just as soon that they did not. Statistics show that only thirty percent of the candidates of the State Board of Pharmacy are successful, but I have an average of eighty percent of successful students. If you fail to pass the State Board, I give you another course free of charge. I have a way of teaching by lectures, charts and actual laboratory work that so simplifies pharmaceutical processes and chemical equations that you cannot help but remember them ever after." All in six months for seventy-five dollars. One wonders what he would take to teach some of us teachers how to do it. Probably this "way" of his is some special endowment that heaven bestows upon a favored few.

Down in Georgia there is a school giving a three months course of which they say, "we have the greatest short course in Pharmacy in the U. S. A."

It has just been reported to us that a certain school has gone out of business and for the state in which the school was located and for pharmacy in general we rejoice. Because their literature shows very well the attempts to make advertising alluring to the uninitiated as well as the kind of instruction offered in a quiz school I am going to quote a few statements, even though the institution no longer exists. Of the course it was said: "The course is not a cram one of State Board questions and answers, but a systematic presentation of the practical parts of a long course in pharmacy. We use the Alphabetic method of teaching. This is a new method. We go from *Acacia* to *Zingiber* and we go over the ground four times." Think of it—four times in fourteen weeks and yet it is not a cram course. In their course of instruction eleven things were enumerated. They were, "Materia Medica, Pharmacology, Chemistry, Preparations, Comment on the Pharmacopoeia, Dictionary, Unofficial Materia Medica, Laboratory Work, State Board Questions."

From Iowa comes this statement: "Between five and six hundred men from this school have registered in the various states during the past six years and the average time they spent in school was between twelve and thirteen weeks. These students show as good a knowledge of their subjects in the examinations as do the average graduates of the regular colleges. They just as frequently write the highest grades in the examinations as do the graduates of the regular colleges. Almost every one who comes to this school has had sufficient practical experience to entitle him to take his state examination. Many of the graduates of the regular colleges have never had any practical experience in the drug business. The course of instruction in the \_\_\_\_\_ school is adapted to the needs of the man with practical experience. It is manifestly unfair to compel him to take his instruction with those who have never had a day's experience in the drug business." Note that last sentence. Is it not a clever appeal to the vanity of many a drug clerk? To continue, "If one is inclined to doubt the thoroughness of the instruction in the \_\_\_\_\_ school, and to question the possibility of covering all the practical features of a regular college course in a three months' term just remember that more men from the \_\_\_\_\_ school have registered in the various states during the past six years than have been graduated by any of the regular colleges of pharmacy with the exception of the Philadelphia, New York and Brooklyn colleges. It is a significant fact that during the past two years thirty-two students from other schools and colleges of pharmacy have attended the \_\_\_\_\_ school. Twenty-nine of these are now registered pharmacists." The subtlety of such advertising is apparent to you all, I am sure, as well as the fact that there is no logic in such argument to those who know conditions.

Out in Kansas there is a school which has a slightly unusual attitude toward previous education, in that it seems to bid especially for people who have attended colleges of pharmacy. Its director says, "The better the educational advantage of the student, the easier it is to complete the work in a short time." Then a list of names and addresses is given together with the colleges attended. It is claimed also that from fifty to sixty percent of those passing Kansas and Oklahoma Boards are from this institution. In the previous nine months there were "received one hundred and thirty-five tuitions for the instruction of students and all of these are holding



certificates as Reg. Ph." Moreover, "My work ranks with universities and I wish to keep it up to that standard. Students not satisfied with the instruction received in my classes may have their money refunded at the end of the course. I have made this guarantee for many years, and in no instance have I failed to prove the quality of my work. My boys and ladies are such a good boost that I find advertising unnecessary." There are three, three-months sessions for those taking Kansas examination and as many for the Oklahoma examinations, at one hundred and twenty dollars per individual, and a six weeks review course for sixty dollars begins six weeks prior to each examination.

The letters from the president of a Maryland institution are still different. Almost as much is said about his publications as about the class work. He writes, "Why not get my first volume of the quiz book which is now issued in paper cover and comprises seventy pages of questions and answers like the specimen pages herewith enclosed. This book costs one dollar post-paid and the amount so paid is credited on your tuition when you enter the resident work. If you contemplate entering it will pay you well to get my book and whether you enter or not, the book is worth many times the price to the student preparing for the State Board of Pharmacy. I hope to hear from you by return mail ordering the "——— Quizzer," and he appends to his signature "author of several books."

Down in Missouri there is a school which sends a contract in which it agrees to do several things of interest to us. "(1) If the student completes the Extension Course in Pharmacy under the direction of —— and then fails to gain registration in —— (blank for state) at one of the two examinations to which his fee entitles him, —— agrees to refund the total amount of tuition paid. (2) The student may transfer or sell the Extension Course to anyone without extra expense, provided that he has it fully paid for and not more than three-fourths used. (3) Should the student decide to attend the Resident School at any time, he will be given credit for the full amount which he has paid for his Extension Course, provided he has his Extension Course fully paid for." It is called a Practitioner's Course, requires from six to eight weeks and costs seventy-five dollars.

In spite of the fact that a few of these institutions giving short courses are not open to criticism and in spite of the other fact that the literature of others leaves so much to conjecture, enough is known to make it evident that the typical short course schools are doing pharmacy no good. From the standpoint of any particular standard college they might be ignored but the profession as a whole cannot afford to do that. The public has these registered pharmacists thrust upon it and only the recording angel knows how many fatalities are traceable to errors of incompetents. Then the good name of our profession is besmirched. How can we expect professional standing while such a condition exists? Some of the institutions that are in states where prerequisite laws have been enacted must soon be singing their swan songs unless under stress of present war conditions some reactionary legislation is obtained. Obviously, this is no time for those of us who want to see pharmacy receive the recognition the real thing deserves, by the Government and by the people, to "fall asleep at the switch."

EDITORS NOTE.—The part of the paper which included a list of the schools and statistics concerning them and which was a necessary feature of the report to the American Conference of Pharmaceutical Faculties is omitted since it would probably be of little interest to the general reader.

Miss Cooper desires to say that the other members of the committee, Prof. Charles O. Lee and Prof. A. W. Linton, rendered valuable assistance in obtaining the necessary facts for this report. In quoting from literature of the schools, the capitalization, abbreviation, etc., have not been changed in the copy.

#### REPORT OF THE COMMITTEE ON THE PHARMACEUTICAL SYLLABUS.\*

TO THE AMERICAN PHARMACEUTICAL ASSOCIATION:

The Committee on the *Pharmaceutical Syllabus* respectfully submits the following report:

At a well attended meeting held in Indianapolis on August 29, 1917, Dr. Willis G. Gregory tendered his resignation as chairman and insisted that it be accepted, which was done with great

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\* Read before General Session, A. Ph. A., Chicago meeting, 1918. The item of expense was referred to the Council.

regret, as he had served the Committee as chairman since its inception, and during the difficult formative period while the first two editions of the *Syllabus* were prepared and published. Dean Theodore J. Bradley, of the Massachusetts College of Pharmacy, and Professor Clyde M. Snow, of the University of Illinois School of Pharmacy, were elected Chairman and Secretary-Treasurer, respectively, and it was decided to proceed with the preparation of a third edition of the *Syllabus* to become effective in 1920.

New members of the Committee have been appointed during the year as follows: Edwin L. Newcomb, of the University of Minnesota College of Pharmacy, from the American Pharmaceutical Association; Otto W. Osterlund, of Philadelphia, Pa., from the National Association of Boards of Pharmacy; and Albert Bolenbaugh, of the Medical College of Virginia School of Pharmacy, Richmond, Va., from the Conference of Pharmaceutical Faculties. Professor Bolenbaugh was later given leave of absence because of having been commissioned in the Sanitary Corps of the United States Army.

Bulletins sent by the Chairman to members of the Committee, from time to time, have been published in the *JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION*, which has thus provided the necessary publicity for our work.

The following sub-committees, to have charge of the revision of the three principal sections of the *Syllabus*, were appointed in November:

Materia Medica: H. H. Rusby, Chairman; M. C. Beebe, G. M. Beringer, John Culley, E. E. Faulkner, C. B. Lowe, E. L. Newcomb.

Chemistry: J. A. Koch, Chairman; P. G. Albrecht, T. J. Bradley, E. G. Eberle, C. W. Johnson, O. W. Osterlund, C. H. Skinner.

Pharmacy: W. H. Rudder, Chairman; W. C. Anderson, Albert Bolenbaugh, G. C. Diekman, W. G. Gregory, H. B. Mason, C. M. Snow.

The work of the Committee has been greatly hampered by the difficult conditions due to the war, but substantial progress has been made on the work: the sub-committees have about completed the revision of their several sections and are expected to submit them soon to the whole Committee for final revision and adoption. It has been decided to prepare a tentative outline for an additional year of work leading to the degree of Pharmaceutical Chemist, and some of the necessary work on this has been done.

A year ago the Committee paid off all of the indebtedness incurred in connection with the issuance of the second edition of the *Syllabus*, and there is now a small balance in the treasury which it is hoped will accumulate sufficiently so that no long continuing debts need be incurred when the third edition is issued. With this end in view, the Committee requests and recommends that your organization continue its annual contribution of twenty-five dollars towards the necessary expenses of the work of the Committee.

Signed, THEODORE J. BRADLEY, *Chairman*.

AUGUST 1, 1918.

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#### REPORT OF THE COMMITTEE ON COMPULSORY HEALTH INSURANCE.\*

Compulsory health insurance still remains one of the most vital issues affecting the drug trade of the country, but there is little to report at this time in addition to the data contained in the paper read at the Indianapolis meeting last year by the Chairman of this Committee. During the past winter only four State legislatures were in session, and the proponents of the idea therefore lacked the opportunity to carry on a vigorous legislative campaign. In the meantime, however, they have not been idle. They have carried on their propoganda in all sections of the country, and it needs no prophet to see that during the coming winter a bill providing for the enactment of compulsory health insurance will make its appearance in practically every legislature throughout the country. It will then be the duty of the drug trade to organize an opposition and do what it can to pull the fangs of this German-made scheme.

At the present time the most dangerous situation exists in the State of California. Sentiment seems to be more in favor of health insurance there than elsewhere, and the advocates of the idea are concentrating their fire in order to get a law enacted in one State before making

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\* Read at the second General session, A. Ph. A., Chicago meeting, 1918.

a big drive elsewhere. California therefore becomes the initial battle-ground. It occupies the front trenches, and if the line breaks the Huns will rush over into other States.

The situation in California is a little peculiar. Before a compulsory health insurance measure can be enacted the State constitution must first be amended. We understand that an amendment goes before the voters this fall and that the State-wide campaign now being conducted is for the purpose of showing the necessity of this constitutional amendment. If the amendment is approved, the battle will then be carried into the legislature, and a well-organized effort will be made to secure the enactment of a drastic law. It behooves the druggists of California not to wait but to assist immediately in the campaign against the adoption of the constitutional amendment, and, if that passes, to carry their opposition subsequently into the legislature.

The people must be told the truth about compulsory health insurance. As a matter of fact, it has recently been discovered that the whole propaganda originated in Germany. During the years prior to the present war Germany was out after world trade. She was ambitious to conquer international markets. The great stumbling block was American competition. How could she lessen it? One brilliant method would be to foist compulsory health insurance on the United States and thus greatly increase the national cost of production. Not only, moreover, did Germany initiate such propaganda efforts in this country, but in every country where she suffered keen competition.

An international society was established to foster the idea. Apparently the whole movement was educational. It was ostensibly altruistic. As much as she could, Germany kept in the background and used others to pull her chestnuts out of the fire. Her own connection with the movement has never been frankly proclaimed, but Dr. Frederick L. Hoffman, in his early investigations of the subject, found every trail running straight to Berlin.

The fact is that Germany has been saddled with the economic burden of compulsory health insurance for many years. She couldn't escape it. The Socialist party foisted it upon her. It greatly increased her own cost of production, and the only thing she could do was to equalize matters by getting compulsory health insurance adopted likewise in other countries.

Certainly it is an ironical situation that confronts us at the present time. On the one hand, we are at war with Germany. On the other, we are earnestly discussing a German movement and are seriously considering the adoption of it. If we defeat Germany on the field of battle, we still run the risk of being beaten by her at home. Because, if the United States adopts compulsory health insurance, it will so add to the cost of production as to make it relatively simple for Germany to compete with us in the markets of the world after the war is over. If we take up with this insidious movement, we shall be playing directly into Germany's hands.

Druggists, even more than other classes in the community, are threatened by this menace. For, if compulsory health insurance ever becomes a fact, it would mean nothing less than that three-fourths of the people of the State would get their drugs from the State itself—and not only their drugs but their medical, dental and surgical service as well. Seventy-five percent of the druggist's business would fly out of the window. Not only that, but his taxes would be quadrupled. The retail drug business as we know it to-day would be practically driven from the field. Only the strongest would be able to survive, and the great majority of druggists would find their occupations gone.

These sound like the statements of an alarmist, but they represent nothing but the truth. If there was ever a time when the druggists of the country should be awake to their own interests, that time is now and here. Organized opposition to compulsory health insurance should be perfected in every State in the Union, and wherever a health insurance bill makes its appearance, it should be fought with all the energy and vigor at our command.

Respectfully submitted,

HUGH CRAIG,  
C. A. MAYO,  
FRANK H. FREERICKS,  
J. H. BEAL,  
W. C. ANDERSON,  
HARRY B. MASON, *Chairman.*

REPORT OF COMMITTEE ON QUALITY OF MEDICINAL PRODUCTS  
AMERICAN PHARMACEUTICAL ASSOCIATION.

(Continued from September, No. p. 817.)

**DOGGRASS:** Oftentimes an excessive amount of stem bases and rootlets are present. If gathered in America it is apt to be the rhizome of any species of the genus *Agropyron*. Bermuda grass has been cut to simulate doggrass and imported and sold as such. The substitution is readily detected by the absence of the bright yellow rhizomes of the genuine and the excessive amount of tracts and rootlets. It may be imported under its proper name of Bermuda Grass.

O. A. FARWELL.

**ERGOT:** Samples yielded to the official fluidextract menstruum 15.6%, 13.3%, 15.8%, 16.8%, 16.9%, 14.6%, 19.3%, 13.3%, 16.06%.

E. L. PATCH.

**EUPHORBIA PILULIFERA:** There is great variation in the products sold under this name. In material particulars they differ from the N. F. description.

E. L. PATCH.

**FENNEL:** Examination of samples has disclosed the fact that bitter fennel, from *Foeniculum piperitum*, Sweet., has been substituted in some instances for the true material. This species is not cultivated and may be distinguished by its very much smaller size and the decidedly bitter taste and flavor of its volatile oil. U. S. Department of Agriculture. Ash 8.95%, 9%, 8.5%, 9.2%.

E. L. PATCH.

**FROSTWORT:** *Lechea major*, Mx. is often collected and put on the market under this name. The true frostworts are species of *Trichasterophyllum*.

O. A. FARWELL.

**GADUOL OR MORRHUOL:** Much has been offered differing from the product originally marketed under this name. Claim—"An alcohol extract from Cod Liver Oil." Original sp. gr. 0.944; characteristic odor; greenish black color. Soluble in equal volume of 95% alcohol. Insoluble in water. Washed with water acidulated with hydrochloric acid the washings give an abundant precipitate with Mayer's solution and solution of iodine.

Sample 1: Sp. gr. 0.920; odor like original; color like original. Does not give any alkaloidal reactions.

E. L. PATCH.

Sample 2: Odor different from original. Not as dark in color; slight precipitate with iodine solution, none with Mayer's.

E. L. PATCH.

**GELATIN:** Three shipments had to be rejected on account of the presence of an undue amount of arsenic.

H. ENGELHARDT.

Contained zinc, and zinc and copper.

U. S. DEPARTMENT OF AGRICULTURE.

**GENTIAN:** The roots of various American species of gentian and of the western species of *Fraseria* have been offered as substitutes for the official gentian.

O. A. FARWELL.

**GINGER JAMAICA:** Alcoholic extract, 5%, 3.5%, 6%, 5.8%, 9.3%, 8%, 6.5%, 4%, 4.5%, 6.9%, 6.3%. Ash 4.8%.

E. L. PATCH.

**GOLDENSEAL:** Of five shipments only one had to be rejected, containing only 0.71% of ether-soluble alkaloids.

H. ENGELHARDT.

One sample 3.18%.

E. L. PATCH.

**GRINDELIA:** Extractive 41%; average 36%. Ash 9%. Extractive 43%; ash 9%.

E. L. PATCH.

**GUAIAC RESIN:** Ash 4.89% very little soluble in alcohol. Ash 3.83%, alcoholic extract 38.3%; ash 3.5%, alcoholic extract 23.9%.

E. L. PATCH.

**HELLEBORE AMERICAN:** Assayed by method of Department of Agriculture given for white hellebore, alkaloidal contents were 2.05%, 1.36%, 1.333%, 2.07%, 2.3%.

E. L. PATCH.

**HYOSCYAMUS:** Sixteen shipments were examined, of which nine assayed below U. S. P. strength. One shipment marked "herb" assayed as much as 0.235% of total alkaloids; this sample consisted of stems, leaves and roots. The leaves assayed 0.115% of mydriatic alkaloids.

H. ENGELHARDT.

"Stems," 0.052%. Leaves by U. S. P. IX method 0.069%, 0.044%, 0.068%, 0.054%, 0.09485%, 0.214%, 0.156%, 0.021%, 0.027%, 0.1446%, 0.0752%, 0.0867%, 0.108% (U. S. P. 0.065%).

E. L. PATCH.

**HOREHOUND:** Examination of importations has disclosed that in some instances *Ballota hirsuta*, Benth. was substituted for *Marrubium vulgare*.

U. S. DEPARTMENT OF AGRICULTURE.

**IODINE TINCTURE:** U. S. P. 6.5 to 7.5 Gm. iodine in 100 Cc., 4.5 to 5.5 potassium iodide in 100 Cc.; 7.69 I, 7.11 I, 7.51 I, 6.98 I, 7.32 I, 7.15 I, 7.1 I; 7.3 Gm. I, 4.85 Gm. KI, 6.77 Gm. I, 4.795 KI.

E. L. PATCH.

**IPECAC:** Of fifteen shipments of Carthagen, four were below official standard. Of nine shipments of Rio, 2 were below.

H. ENGELHARDT.

2.09%, 2%, 1.95%, 2.28%, 2.01%, 1.92%.

E. L. PATCH.

**IRON ARSENATE:** Had to be rejected on account of containing ferric arsenate.

H. ENGELHARDT.

**IRON CACODYLATE:** A small shipment of this chemical had to be rejected on account of giving a dark red solution with water.

H. ENGELHARDT.

**IRON DIALYZED:** We experienced quite a difficulty with this preparation. Two lots had a cloudy appearance and did not readily mix with water.

H. ENGELHARDT.

**IRON REDUCED:** Some shipments contained excess of sulphides. They contained about 95% of reduced iron when determined by the U. S. P. process.

H. ENGELHARDT.

94% reduced iron, slight excess of sulphide; 94.34%, 92.1%, 85.14%, 90.8%.

E. L. PATCH.

**JALAP:** The quality of this drug was all that could be desired. Only two shipments of ten had to be rejected on account of assaying less than 7% resin. One sample was submitted which apparently was Tampico jalap. It differed only in shape from the official drug and assayed 18% total resin of which only 4% was soluble in ether.

H. ENGELHARDT.

7.65%, 3.65%, 7.15%, 7.1%, 5.6%, 16.8%.

E. L. PATCH.

**JALAP RESIN:** One sample, only 78% soluble in alcohol, 28% soluble in water. Rejected. Another, 96% soluble in alcohol, 10% in water. Rejected.

E. L. PATCH.

**JUNIPER BERRIES:** Berries of the western species of that section of *Juniperus* including *J. scopulorum*, have been gathered and offered for juniper berries.

O. A. FARWELL.

Shipments in many instances contained a considerable number of discolored and withered berries. Should not contain more than 10% of immature, discolored, and withered berries or foreign material.

U. S. DEPARTMENT OF AGRICULTURE.

**LICORICE ROOT:** Shipments of licorice root have been imported which proved to be derived from *Glycyrrhiza uralensis*, an Asiatic species, not recognized in the U. S. P. but equal in every respect to the official. By a ruling of the Department of Agriculture this can be imported if properly named and stamped "not U. S. P." which means it can be used for non-official preparations. Since the beginning of the war licorice root has steadily deteriorated. Culls are frequently included and the stems even to a very large percentage.

O. A. FARWELL.

Extractive 29.4%. Ash 6.8% (U. S. P. limit 7%).

Extractive 21.4%. Ash 7.4%.

Extractive 24.6%. Ash 6.8%.

Extractive 31%. Ash 8.8%.

Extractive 26.96%. Ash 6.4%.

Extractive 36%. Ash 8.55%.

Extractive 40.3%. Ash 5.92%.

Extractive 24%. Ash 10%.

Extractive 27%. Ash 8.6%.

Extractive 8.34%. Ash 3.5% (not licorice root).

Extractive 28%. Ash 6.6%.

Extractive 30.32%. Ash 8.6%.

**LICORICE EXTRACT, POWDERED:** Extractive 79.2%. Moisture 6.2%. Ash 4.6%.

E. L. PATCH.

**LIME CHLORINATED.** Standard 30% chlorine.

20% available chlorine. 8%, 10%.

34% available chlorine 30.7%, 33.7%.

27.01%, 26.97%, 32.98%, 33.24%, 31%, 32.27%.

34.75%, 34.75%, 30.48%, 30.48%, 31.56%.

E. L. PATCH.

**LOBELIA:** Alkaloid 0.52%, 0.5%, 0.54%, 0.56%, 0.5%, 0.56%, 0.6%.

E. L. PATCH.

**LUPULIN:** Six shipments were examined of which two were rejected. One yielding 16.7% ash and one yielding 40% of ash and being soluble in ether only to an extent of 44.1%.

H. ENGELHARDT.

**MAGNESIUM CARBONATE:** Water soluble 0.015, U. S. P. 0.01, CaO 0.88% (U. S. P. 0.88). MgO 39.46% (U. S. P. 39.2%). Water soluble 0.014, CaO 1.95, MgO 40.40%.

E. L. PATCH.

MAGNESIA, CALCINED: MgO 94.28%, moisture 4.32% (U. S. P. MgO 96%).

MgO 95.45%, moisture 3.2%.

MgO 94.64%, moisture 6%.

MgO 89.3%, moisture 2.69%.

MgO 92.8%, moisture 6.45%.

E. L. PATCH.

MALE FERN: Extract of male fern adulterated with 25% castor oil. It contained only 8% crude filicin instead of 24%. *The Apothecary*. Oleoresin. This article is practically unobtainable. We succeeded in obtaining a few lots but these had to be purified on account of assaying less than 27% of crude filicin, the requirement for good oleoresin of male fern.

H. ENGELHARDT.

MANACA: There are two varieties, the red and the white. The red manaca is the one used for medicinal purposes, the white has been imported in considerable quantities. It is distinguished by having a soft, white root, abundantly covered with small flakes of cork of a tissue paper thickness.

O. A. FARWELL.

MANGANESE DIOXIDE: Two shipments assayed only 70.7% and 76.8% of MnO<sub>2</sub>.

H. ENGELHARDT.

MATICO: \* Has been substituted by the leaves of *Eupatorium glutinosum* growing in the same regions as genuine matico, *Piper angustifolium*. Careful comparison shows certain differences.

Genuine.

Substitute.

Leaves alternate.

Leaves opposite.

Margin finely crenulate.

Margin serrate.

Base unequal, oblique, subcordate.

Base cordate.

Venation palmate-pinnate prominent below.

Venation pinnate.

Upper surface scabrous and finely bullate.

Upper surface scabrous and coarsely bullate,

Lower surface pubescent; simple hairs; glandular hairs absent.

Lower surface very woolly, due to numerous long, simple, much twisted hairs; numerous short glandular hairs.

Subsessile or short petiolate.

Petiole 1 to 3 Cm. long.

Length 10 to 20 Cm.

Length 5 to 14 Cm.

Breadth 2 to 5 Cm.

Breadth 1 to 3 Cm.

U. S. DEPARTMENT OF AGRICULTURE.

MOUNTAIN SAGE: *Artemisia tridentata*, *A. Ludoviciana* and other species of *Artemisia* have been gathered in large quantities as substitutes. Mugwort, *Artemisia Mexicana* has been offered as a substitute.

O. A. FARWELL.

MYRRH: Alcoholic extractive 24.67%, 24.09%.

E. L. PATCH.

NEOSALVARSAN: Ampoules containing starch and salt have been sold for neosalvarsan 15,000 such ampoules were filled in Jersey City. They were put up in packages to imitate the German or English makes.

*Apothecary*.

NITROUS ETHER, SPIRIT: One hundred and twelve samples below standard.

MASSACHUSETTS STATE BOARD.

NUX VOMICA: Seven lots; total alkaloids, 2.61%, 2.678%, 2.975%, 3.19%, 3.16%, 2.5%, 2.49%.

E. L. PATCH.

OPIUM: Most of the opium received in this country appears to come from Persia. Ten shipments received were of good quality.

H. ENGELHARDT.

Powdered 11.7%, 10.94%.

E. L. PATCH.

PAPAIN: One part digests 13.6 fibrin in neutral solution; 24.1 in alkaline.

One part digests 13.6 fibrin in neutral solution; 24.4 in alkaline.

One part digests 12.0 fibrin in neutral solution; 20 in alkaline.

E. L. PATCH.

PARSLEY SEED: Of ten shipments one was rejected, yielding only 11% ether soluble resin.

H. ENGELHARDT.

PENNYROYAL: This product has been very carelessly collected and frequently contains very large amounts of sand, stems and other foreign material. Pennyroyal leaves should not contain more than 10% stems, more than 16% ash and not more than 6% of acid-insoluble ash (sand).

DEPARTMENT OF AGRICULTURE.

PEPSIN: Two shipments were deficient in proteolytic power.

H. ENGELHARDT.

**PETROLEUM BENZIN:** Very difficult to find a product meeting the U. S. P. requirements. Much sold under this name has a specific gravity of 0.7400 or more, while the official range is 0.638 to 0.660. The usual product has considerable foreign odor. The Standard Oil Company formerly marketed a "Gas Machine Gasoline" having a sp. gr. of about 0.6508 at 25° C., but they have discontinued it.

E. L. PATCH.

**PETROLATUM OILS:** White mineral oils of exceptional quality of American source can now be readily obtained. Occasionally they are defective. Two lots would not meet the sulphuric acid test.

E. L. PATCH.

**PHENOL:** This product is made almost exclusively in this country at the present time and is generally of good quality; however, we received a few shipments which possessed a nauseating odor resembling sulphuretted compounds.

H. ENGELHARDT.

**POTASSIUM PERMANGANATE:** One shipment contained manganese oxide and another assayed only 86% of absolute salt.

H. ENGELHARDT.

**PRICKLY ASH BARK:** A common substitute is prickly elder bark (*Aralia spinosa*). It is readily distinguished by taste as it does not produce the acrid or tingling sensation developed by the genuine xanthoxylum.

O. A. FARWELL.

**QUASSIA:** Extractive 3.3%, 5%, 4%. Ash 2.8%, 3.4%, 3%.

E. L. PATCH.

**QUININE SULPHATE:** One lot contained a decided trace of other cinchona alkaloids.

E. L. PATCH.

**RENNET:** Much difficulty was experienced with this product. In regard to its curdling power it would be advisable to give more detailed directions for the assay process, especially in regard to the absence of preservatives in the milk used for testing rennet.

H. ENGELHARDT.

**SARSAPARILLA, MEXICAN:** Supplies have been more or less curtailed with a consequent rise in price. Many substitutes have been brought forward, some of which are the roots of unofficial species of Smilax. One substitute is the rhizome of some fern. Externally it is black, dorsiventral and when broken crosswise shows a structure similar to that of *Iteris aquilina*. This is not permitted to enter the country under the name of Sarsaparilla, but considerable quantities have been admitted under the name of "Black Sarsa."

O. A. FARWELL.

**SOFT SOAP:** Much complaint is entered by physicians as to the color, odor, etc., of the U. S. P. IX product made from cottonseed oil and some insist on the U. S. P. 1900 made from linseed oil.

Two lots gave 0.6% of free oleic acid. Residue 3.5% and 2.9% (U. S. P. 3%).

E. L. PATCH.

**SOAP LINIMENT, U. S. P.:** Refractive index 1.3750; alcohol 69%. Diluted with water, salted and ether washed 100 Cc. gave 5.3% residue. Evaporation of original 5.4%.

Market sample: Refractive index 1.3702; alcohol 66%. Ether washing 2.7%. Evaporation of original 4.25%. (Half quantity of oils about 80% of soap.)

U. S. P., refractive index at 20°, 1.3771. Evaporation 5.73%.

Sample, refractive index 20°, 1.3770. Evaporation 5.5%.

E. L. PATCH.

**SODIUM BENZOATE:** No. 1, assayed 99.38%. No. 2, 99.38 sodium benzoate, 0.35 sodium chloride.

E. L. PATCH.

**SODIUM CHLORIDE:** Worcester salt, moisture 0.5% NaCl 99.67% (includes CaCl<sub>2</sub>).

Prominent name, U. S. P., moisture, NaCl 99% (includes CaCl<sub>2</sub>).

Prominent name, U. S. P., moisture, NaCl 97%, contained Ca, Mg and sulphate.

Prominent name, U. S. P., moisture, NaCl 99.2% contained Ca, Mg and sulphate.

Prominent name, highest purity, 99.86%, 99.57%, 99.86%, 99.28%.

E. L. PATCH.

**SPIKENARD:** Extractive 21%, 7% ash, 24% extractive, 15% ash.

E. L. PATCH.

**STRAMONIUM LEAVES:** This drug is largely cultivated in this country and out of ten shipments we were compelled to reject only one assaying 0.22% of total mydriatic alkaloids.

H. ENGELHARDT.

Leaves of various unofficial species of datura have been gathered and offered as stramonium. Probably most of the spurious drug comes from *D. meteloides* and can readily be differentiated by the pubescent character of the leaves.

O. A. FARWELL.

0.24% alkaloids, 10.324%.

E. L. PATCH.

The leaves of *Xanthium strumarium* L. have been substituted for true stramonium. They do not contain the characteristic alkaloids of the genuine.

## DEPARTMENT OF AGRICULTURE.

STYRAX: Soluble in alcohol 82%, 17% volatile matter, 7% residue. Smelled like shoemaker's wax. E. L. PATCH.

TANSY: The leaf apparently has disappeared, or soon will, from the market. Its place has been taken by the herb, usually cut, which contains an excessive percentage of heavy inert stems. O. A. FARWELL.

UNICORN ROOT, ALETRIS: Extractive 16.7%. Ash 7.3%. Extractive 12.2%. Ash 9.4%. E. L. PATCH.

Excessive amounts of total ash and acid-insoluble ash have been found in lots of Aletris. In a few instances the limit of 16% given in the N. F. was exceeded. If properly collected total ash should not exceed 10% and acid-insoluble ash 5%. One lot contained 3% true Aletris and 97% false Unicorn, *Chamaelirium luteum*.

## DEPARTMENT OF AGRICULTURE.

VALERIAN: There has been gathered in Mexico and offered for sale as Valerian, a long spindle-shaped root that has the characteristic valerian odor. Needless to say it is not the official drug, which is a fibrous root. O. A. FARWELL.

VIBURNUM: Nearly all samples of *Viburnum prunifolium*, black haw, have proved to be genuine, while most lots claiming to be *Viburnum opulus* have proved to be mountain maple bark, *Acer spicatum*. Mountain maple bark may be distinguished by its fracture, which is fibrous, while that of Cramp Bark is short and weak, since it has no bark fibers or the fibers, if present, are few and scattered. The barks may further be distinguished by the color which develops when a drop of 1% or 0.1% ferric chloride solution is placed on the inner surface of the bark. After several minutes a blue color develops in the case of mountain maple and a green color in the case of cramp bark, due to the tannin in the bark. If woody tissue is present it should be removed before making the test.

## DEPARTMENT OF AGRICULTURE.

WATER PEPPER: This drug is derived from *Polygonum acre* and perhaps *P. hydropiper* the species with acrid leaves. *P. Persicaria* and *P. hydrapiperoides* are largely used as adulterants and substitutes. O. A. FARWELL.

WILD CHERRY: The barks of the Rocky Mountain species of cherries have been gathered and offered as wild cherry. The bark is thicker and distinguished by the narrow transverse ridges on the outer bark, in more or less scattered but concentric circles.

O. A. FARWELL.

Four grammes of good bark should yield over 2 minims or 0.124 mils of 2% hydrocyanic acid. Four lots were below this standard. 1.04 minims, 1.37, 0.847 and 1.44.

E. L. PATCH.

WINES: A carload of Sherry Wine was rejected on account of having a cloudy appearance and having an acid reaction due to after-fermentation. H. ENGELHARDT.

Sherry, alcohol 19.56% volume, 19.16%, 18.16%.

Port, 20%, 19.24% (5.5 Gm. residue from 100 mils) 19.4%.

20.9%, 18.34%.

Malaga, 18.84% alcohol.

E. L. PATCH.

XANTHORRHIZA: The root of this plant is gathered in large quantities and offered sometimes as goldenseal, sometimes as berberis. O. A. FARWELL.

YELLOW DOCK: Cannaigre and the roots of various species of Rumex have been offered for the official *Rumex crispus*. O. A. FARWELL.

YERBA SANTA: Much is offered containing 15 to 20% of large stems, instead of the 5% limit of stem, and inert old or improperly dried leaves. E. L. PATCH.

ZINC OXIDE: Many lots contain excess of lead.

## DEPARTMENT OF AGRICULTURE.

99.27% ZnO, trace only of heavy metals, 99.68% ZnO, slight trace of heavy metals; 99.36% ZnO, 0.1% ZnCl<sub>2</sub>, slight trace of iron, no lead; 99.36% ZnO, 0.2% ZnCl<sub>2</sub>, no other heavy metals.

E. L. PATCH.

EDGAR L. PATCH,

H. ENGELHARDT,

O. A. FARWELL,

Committee.