

JOINT SESSION OF THE AMERICAN PHARMACEUTICAL ASSOCIATION, THE AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY AND THE NATIONAL ASSOCIATION BOARDS OF PHARMACY

The Joint Session was held in the Hotel Nicollet, Minneapolis, Minn., on Tuesday, August 23rd, at 9:30 A.M., with President Gathercoal of the A. Ph. A., President Muldoon of the A. A. C. P. and President Swain of the N. A. B. P. acting as co-chairmen.

In calling the session to order, President Swain of the N. A. B. P. welcomed those present and called attention to the constructive value of the Joint Sessions of these closely related groups to consider matters of mutual interest.

COMMITTEE ON FAIRCHILD SCHOLARSHIP.—Chairman E. G. Eberle read the following report, which was received.

"The Fairchild Scholarship Committee of this year is composed of E. N. Gathercoal, Hugh C. Muldoon, Robert L. Swain, and E. G. Eberle, *Chairman*. The Detroit Institute of Technology, College of Pharmacy and Chemistry, presented no candidate for the examination and the Head of the Department of Pharmacy, Dean E. P. Stout, with the assistance of other members of the faculty, consented to prepare the questions for the examination and grade the answers.

Twenty-five candidates participated in the examination representing seventeen schools. Six of these candidates averaged 75 per cent or more; the candidates were graduates of the four-year course of their respective schools.

The examinations were given under four subjects: Pharmacy, Chemistry, Materia Medica and Pharmaceutical Arithmetic. The highest general average was made in Pharmaceutical Arithmetic, 82.52; next in Pharmacy, 82.07; next in Materia Medica, 70.23; and lowest in Chemistry, 37.12. The general average in all subjects was 68.10. The highest per cent made in Pharmacy was 96.78; in Chemistry, 81.00; in Materia Medica, 90.20; and in Pharmaceutical Arithmetic, 100.00. The lowest per cent in Pharmacy, 35.18; in Chemistry, 0; in Materia Medica, 38.60; in Pharmaceutical Arithmetic, 40.00. The general average in Pharmacy was 82.07; thirteen made above that average; fifteen made 70 or over. The general average in Chemistry was 37.12; twelve made above that average; fifteen made 70 or over. The general average in Materia Medica was 70.23; fifteen made above that average; fourteen made 70 or over. The general average in Pharmaceutical Arithmetic was 82.52; eleven made above that average; twenty made 70 or over. The average of the general averages was 67.99; fourteen made above that average; twelve made 70 or over.

Scheduled report of twelve candidates follows:

Candidate.	Pharmacy.	Pharmaceutical Arith.	Chemistry.	Materia Medica.	Average.
1	96.78	100	81.00	90.20	91.99
2	92.50	100	63.00	77.80	83.33
3	92.00	100	37.00	84.20	78.30
4	88.60	100	42.50	78.10	77.30
5	79.46	93.33	48.00	83.50	76.07
6	73.84	83.33	62.00	74.90	76.02
7	77.60	100	40.00	79.50	74.28
8	96.63	80.00	41.00	72.30	72.48
9	79.50	100	32.00	76.50	72.25
10	83.00	73.33	41.00	88.00	71.33
11	94.65	80.00	31.00	78.40	71.01
12	83.00	100	47.50	52.40	70.72

The candidate making the highest average, 91.99, made the highest in all branches; the next in line made 83.33.

The winning candidate was listed on the high scholarship record of the University for eight quarters, and he won University Honors for two years.

The report of the Grading Committee was submitted to the members of the Fairchild Scholarship Committee and all the members voted to accept the report of the Grading Committee.

The chairman desires to thank his colleagues for their support and the members of the Examining and Grading Committees for their helpfulness. It requires time on the part of the latter, and thanks are extended.

The award is made on the basis of the highest general average of the candidate.

The winning candidate is Arthur W. Steers, who was born in Ketchikan, Alaska, May 27, 1913. He moved with his parents to Fall City, Washington, where he graduated from the Fall City High School in 1930. His High School credits are as follows: English, 4 units; Algebra, 1½ units; Plane Geometry, 1 unit; Solid Geometry, ½ unit; History and Civics, 1 unit; Economics, ½ unit; Biology, 1 unit; Chemistry, 1 unit; Physics, 1 unit; General Science, 1 unit; Spanish, 2 units; and Vocational Subjects, 4 units; a total of 18½ units, or 37 counts. He entered the University of Washington as a freshman October 1, 1934, and was graduated with the degree of Bachelor of Science in Pharmacy, June 11, 1938. He was listed on the high scholarship record of the University for eight quarters and won University Honors for two years.

Mr. Steers was admitted to associate membership in Sigma Xi the spring quarter of 1937. He is also a member of Rho Chi. The Lehn and Fink gold medal was awarded in June 1938, to Mr. Steers.

Mr. Steers usually spends his summers as a pharmacist in a drug store in Ketchikan, Alaska. He was employed two summers by the National Cannery Association in the investigation of spoilage of canned salmon. This involved field work in Alaska and chemical analysis in the National Cannery laboratory in Seattle.

Mr. Steers has a definite graduate program planned and expects to work for the degrees of Master of Science and Doctor of Philosophy.

COMMITTEE ON PHARMACEUTICAL SYLLABUS.—In presenting the report, which was received, Chairman Burlage made the following comments:

"The Syllabus Committee held a lengthy meeting on Sunday afternoon, at which time some very important matters of policy were brought up. There are going to be two special meetings held this week. A sub-committee from the Syllabus Committee is meeting with the American Council of Pharmaceutical Education concerning certain policies, and on Thursday there will be a second meeting. The details of those meetings will have to come in a later report."

"The Committee held a short meeting in New York in 1937, at which time Dean J. G. Beard resigned as chairman. The present chairman was notified of his election late in October.

Immediate plans were formulated for revising the present outlines of the Syllabus and, where it was deemed advisable, for the presentation of new ones. Following, in general, the procedure employed in the last revision, twenty-six (26) sub-committees have been formed.

The chairman of the Syllabus Committee has endeavored, by inquiry from others and through personal contacts, to select persons to head these groups, who were properly prepared and recognized in their respective fields and, above all, were willing to assume the responsibilities of the tasks before them.

Each sub-committee chairman has been permitted to select the personnel of his group, however, the Syllabus chairman has been consulted and has, in turn, advised freely in these selections. Although the composition of all groups is not yet complete more than one hundred and ten (110) persons from all sections of the country are actively engaged in the revision work and no doubt, in many cases at a real sacrifice of time and energy. It is hoped that the product of their endeavors will be worthy of these efforts and in return will receive the proper recognition from all pharmaceutical groups.

A list of these collaborators follows:

COMMERCIAL SUBJECTS.

P. C. Olsen, Philadelphia, *Chairman*.
C. Leonard O'Connell, Pittsburgh
B. Olive Cole, Maryland
E. Fullerton Cook, Philadelphia

C. W. H. Scholz, Wharton School of Finance
H. W. Heine, Purdue
H. P. Frank, Philadelphia
J. N. McDonnell, Philadelphia

PHARMACY SUBJECTS.

Arithmetic of Pharmacy.

E. L. Hammond, Mississippi, *Chairman*
 J. W. Sturmer, Philadelphia
 Edward Spease, Western Reserve
 C. H. Stocking, Michigan
 R. R. Kreuer, Duquesne

Elementary Principles of Pharmacy.

J. B. Burt, Nebraska, *Chairman*
 C. O. Lee, Purdue
 Wm. A. Jarrett, Creighton
 George W. Hargreaves, Alabama
 E. T. Motley, South Carolina

Dispensing Pharmacy.

L. W. Rising, Washington, *Chairman*
 H. C. Newton, Massachusetts
 W. J. Husa, Florida
 L. W. Richards, Montana
 G. Bachmann, Minnesota

Galenical Pharmacy.

F. V. Lofgren, Valparaiso, *Chairman*
 N. T. Chamberlin, Western Reserve
 C. L. Cox, Rutgers

History and Literature of Pharmacy.

E. J. Ireland, Florida, *Chairman*
 Edward Kremers, Wisconsin
 Wm. Richtmann, Wisconsin
 C. O. Lee, Purdue
 C. C. Albers, Texas
 Loyd E. Harris, Oklahoma

Hospital Pharmacy (Dispensing).

Edward Spease, Western Reserve, *Chairman*
 W. G. Crockett, Virginia
 H. A. K. Whitney, Michigan
 I. T. Reamer, Duke

Insecticides.

Loyd E. Harris, Oklahoma, *Chairman*
 J. J. Davis, Purdue
 Z. P. Metcalf, North Carolina State

Latin of Pharmacy.

H. C. Muldoon, Duquesne, *Chairman*
 J. G. Beard, North Carolina
 J. L. Hayman, West Virginia
 Leon Thompson, Massachusetts
 W. F. Gidley, Texas

Manufacturing Pharmacy.

Ed. D. Davy, Western Reserve, *Chairman*
 W. G. Crockett, Virginia
 M. J. Andrews, Maryland
 H. A. K. Whitney, Michigan

New and Non-Official Remedies.

Marvin J. Andrews, Maryland, *Chairman*
 P. A. Foote, Florida

Pharmaceutical Jurisprudence.

R. L. Swain, Maryland, *Chairman*
 Robert P. Fischelis, New Jersey

Pharmacy of Inorganic Substances.

H. C. Newton, Massachusetts, *Chairman*

Pharmacy of Organic Substances.

R. E. Terry, Illinois, *Chairman*

PHARMACEUTICAL CHEMISTRY SUBJECTS.

Biochemistry.

H. B. Lewis, Michigan, *Chairman*
 C. E. Schmidt, California
 C. J. Klemme, Purdue
 F. C. Forbes, Virginia

Inorganic Pharmaceutical Chemistry
(Qualitative?).

H. G. DeKay, Purdue, *Chairman*

Organic Pharmaceutical Chemistry.

F. F. Blicke, Michigan, *Chairman*
 M. T. Bogert, Columbia
 W. H. Hartung, Maryland
 C. T. Daniels, California
 F. A. Gilfillan, Oregon
 G. W. Webster, Illinois

Quantitative Pharmaceutical Chemistry.

G. L. Jenkins, Minnesota, *Chairman*
 M. L. Jacobs, North Carolina
 G. E. Cwalina, Creighton

BIOLOGICAL SUBJECTS.

Botany.

H. W. Youngken, Massachusetts, *Chairman*
 H. R. Totten, North Carolina
 F. J. Bacon, Western Reserve
 C. W. Ballard, Columbia
 L. K. Riggs, Washington
 C. J. Zufall, Purdue

Bacteriology.

L. Gershenfeld, Philadelphia, *Chairman*
 Malcolm Soule, Michigan
 T. C. Grubb, Maryland
 F. Hart, Columbia

Pharmacognosy.

B. V. Christensen, Florida, *Chairman*
 H. W. Youngken, Massachusetts
 E. H. Wirth, Illinois

Pharmacology and Bioassay.

J. M. Dille, Washington, *Chairman*
 H. G. O. Holck, Nebraska
 H. B. Haag, Virginia Medical College
 P. J. Hanzlik, Stanford
 R. N. Bieter, Minnesota

Physiology and Zoölogy.

R. A. Deno, Rutgers, *Chairman*
 A. J. Carlson, Chicago
 J. M. Dille, Washington
 R. A. Lyman, Nebraska
 R. J. Main, Virginia
 P. Okkelberg, Michigan
 A. F. Shull, Michigan
 H. B. Ward, Illinois

MISCELLANEOUS SUBJECTS.

Public Health Studies.

Leonard J. Piccoli, Fordham, *Chairman*
 R. A. Lyman, Nebraska
 M. J. Rosenau, North Carolina
 H. Emerson, Columbia
 B. E. Holsendorf, U. S. Public Health
 A. Hardy, Columbia
 R. P. Fischelis, New Jersey
 E. B. Phelps, Columbia
 C. F. Meyers, California

CULTURAL SUBJECTS.

J. L. Powers, Michigan, *Chairman*
 R. L. Swain, Maryland
 Edward Spease, Western Reserve
 J. G. Beard, North Carolina
 C. O. Lee, Purdue

STATE BOARD QUESTIONS.

R. P. Fischelis, N. J., *Chairman*
 H. A. K. Whitney, Michigan
 R. B. Cook, West Virginia
 State Board Members of the Syllabus
 Committee

Each sub-committee chairman was furnished with the following list of instructions, in order to obtain some semblance of uniformity and completeness in the reports submitted:

1. Study articles that have been written by individuals interested in the particular type of instruction and which have appeared in the *JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION* since 1930, in the *American Journal on Pharmaceutical Education* and the reports of the Committee on Curriculum and Teaching Methods, which appeared in the January issue of the last-named *Journal*.

2. Recommend appropriate titles and list synonymous names that are used for the subject matter involved.

3. Present a clear interpretation of the objectives and functions of the course outlined.

4. Recommend minimum hours—didactic and laboratory—that the course proposed can be given in and yet maintain dignity and standards; also the optimum number of hours that should be devoted to the subject matter.

5. List the desirable prerequisites.

6. State the appropriate year (or years) in which the subject should be offered and state if required or optional.

7. Final outline submitted to follow form used by the present Syllabus.

To date fifteen (15) final reports and outlines have been received. Five (5) of these have been sent for criticism and comments to all of the Schools of Pharmacy and the secretaries of Boards of Pharmacy and replies, especially from the former group, are being received. Due to a lack of time the remaining ten (10) have only been distributed to the members of the Syllabus Committee.

The following Executive Committee, to act upon matters requiring immediate attention, has been approved by the General Committee:

W. G. Crockett, representing the A. A. C. P.
 Glenn L. Jenkins, representing the A. Ph. A.
 R. L. Swain, representing the N. A. B. P.
 J. G. Beard, ex-chairman of the Committee

A financial report extending from August 1, 1937 to August 15, 1938, is offered:

Receipts:

Balance on Hand August 1, 1937.....	\$108.43
Received from Ex-Chairman J. G. Beard, November 1, 1938.....	511.47
Sales of Syllabi.....	15.52
Contribution from A. A. C. P.....	100.00
Contribution from N. A. B. P.....	50.00
Contribution from A. PH. A.....	50.00
Interest.....	9.25
Total.....	<u>\$844.67</u>

Disbursements:

Postage and Supplies (miscellaneous).....	\$ 65.65
Duplicating.....	111.87
Clerical.....	56.75
Check Service Charge.....	2.00
Total.....	<u>\$236.27</u>
Cash Balance.....	\$608.40."

AMERICAN COUNCIL ON PHARMACEUTICAL EDUCATION.—Secretary DuMez read the report of the Council as follows, which was received:

"The following constitutes the sixth annual report of the secretary-treasurer of the American Council of Pharmaceutical Education. It covers the period August 16, 1937, to August 30, 1938, inclusive.

Membership.—There have been no changes in the membership of the Council during the year. Attention, however, is called to the fact that the terms of office of the following expire this year.

E. F. Kelly, representing the A. PH. A.
 H. C. Christensen, representing the N. A. B. P.
 A. G. DuMez, representing the A. A. C. P.
 David Allan Robertson, representing the A. C. E.

Prompt attention should be given to this matter by the organizations concerned so that there may be no vacancies. The Council will be unusually busy during the coming year inspecting colleges and a full membership is desirable.

Meetings.—Since August 15, 1937, the Council has held two meetings; one in Washington, D. C., on December 6, 1937, and one in Baltimore on March 5, 1938.

At the December meeting final approval was given to the preparation of a booklet containing the constitution and By-Laws of the Council and the standards for the accreditation of colleges and to the questionnaire forms to be completed by the colleges prior to inspection. Letters to be sent to the colleges of pharmacy and the secretaries of the state boards of pharmacy announcing that the Council was ready to begin the inspection of the colleges for accreditation were drafted. Provision was also made for the preparation of a release to the pharmaceutical press.

The entire time of the March meeting was devoted to the reviewing of the completed questionnaires received and to the perfecting of arrangements for the inspection of as many as possible of the colleges from which applications for accreditation had been received.

Other Activities.—Immediately after the March meeting, arrangements were made to have 500 copies of the booklet containing the standards for accreditation and 250 copies of the questionnaire form printed. Copies of each were sent to the colleges of pharmacy on December 15th with a letter informing them of the fact that the Council was now ready to begin the inspection of colleges of pharmacy for the purpose of determining their eligibility for accreditation and of the procedure which the colleges should follow in making application for accreditation. In this letter it was also stated that a uniform charge of \$175.00 would be made for each inspection and that this cost would have to be borne by the colleges seeking accreditation. Copies of this letter with the booklet and questionnaire were also sent to the secretaries of the state boards of pharmacy

and other state officials who requested them. Two weeks later, on January 3rd, a press release describing the work of the Council and carrying the notice that the latter was now ready to function as an accrediting agency was sent to the pharmaceutical journals so that all concerned might be fully informed of the progress which was being made.

In the letter of December 15th to the colleges, the latter were invited to make application for accreditation and to complete and return the questionnaire forms by February 15th so that they could be reviewed by the Council before committees were assigned to make the inspections. At the end of this period, February 15th, 35 completed questionnaires had been received. These were reviewed by the Council at the meeting held on March 5th and plans were made to inspect as many of these colleges as possible before the end of the school year.

Summary of Progress in Work of Accreditation Made to Date.—Information received from the state boards of pharmacy shows that there are 75 colleges of pharmacy in the United States proper, 1 in Porto Rico, and 5 in the Philippine Islands. Seven of the 75 in the United States proper are so called "quiz" or "review" schools. Of the 68 regular colleges of pharmacy in the United States proper, all but 1 have either filed applications for accreditation or have signified their intentions of doing so. Fifty-one have already filed applications, 43 have completed the questionnaire forms and are ready to be inspected; 8 state that they will return the completed questionnaire forms in the fall or early winter. Of the 43 colleges which have completed the questionnaire forms, 13 have been inspected.

In addition, conferences have been held with the Deans of three other colleges, the completed questionnaire forms of which indicated that they were not ready for inspection at this time.

Financial Statement.—Attached hereto is a financial statement for the year. The unusually large balance is due to the fact that the Council has been paid \$175.00 each for the inspection of 13 colleges, which amounts to a total of \$2275. Only a portion of this was required to pay the expenses of inspection because the schools inspected were located so that time and expense could be saved. The unexpended balance will be required when the schools located at greater distances, in the south and far west, are inspected. From the standpoint of the contributions received from the three sponsoring associations, the AMERICAN PHARMACEUTICAL ASSOCIATION, the National Association of Boards of Pharmacy and the Association of Colleges of Pharmacy, the expenditures exclusive of those for the inspection of colleges consumed the greater part of the \$600.00 contributed. The two meetings of the Council held during the year cost approximately \$400.00 and additional expenditures for postage, stationery, telephone calls, etc., amounted to approximately \$45.00. Next year, when we undertake to complete the inspection of the colleges and to determine from the information assembled which of them are eligible for accreditation, we will, in all probability, have to hold more meetings of the Council and the expenditure will increase accordingly.

Conclusion.—Based on the experience of the past year, it is the opinion of the Council that the work is progressing as rapidly as can reasonably be expected. The response of the colleges on the whole has been most encouraging. Apparently, there is a wholesome respect for what the Council is trying to do and little or no opposition has been encountered. As a matter of fact, some of the colleges of pharmacy were in the midst of making important changes in organization and curriculum during the past year or were contemplating changes in organization and curriculum which would become effective at the beginning of the next school year. These have requested that inspection be deferred until sometime next year. A few others have stated outright that they cannot meet the standards now but will make application for accreditation as soon as they feel that they can meet the requirements of the Council. In a few instances, colleges have reported that they have had some difficulty in raising the funds to meet the cost of inspection, but all expressed the opinion that this difficulty would be overcome next year when provision for this expenditure would be made in the new budget.

There remain 55 colleges to be inspected. This is an enormous task to be completed in the course of one school year, but the Council believes that it can be done if work is begun promptly with the opening of the colleges in the fall. One of the greatest difficulties will be that of making out itineraries which will keep the cost of inspection within the \$175.00 limit set. It is believed however, that this can be successfully overcome if the colleges which have not made formal application to date and those which have not yet completed the questionnaire forms will do so promptly. The expenses of inspection will exceed \$175.00 if only one college can be inspected on

a single tour of the inspection committee, particularly if the college is located at a great distance from the city in which the inspectors reside.

The fine coöperation received from the secretaries of the State Boards of Pharmacy and the Deans of the Colleges of Pharmacy has been responsible in no small measure for the satisfactory progress which the Council has made to date and I know that I speak for all the members of the Council when I say that this coöperation is greatly appreciated and that it is hoped it will be continued so that we may reach the goal which we have set for ourselves, namely, the publication of a roll of accredited colleges of pharmacy by September 1, 1939.

FINANCIAL STATEMENT.

Receipts:

August 10, 1937	Balance on Hand.....	\$573.94
December 20	A. A. C. P. Contribution.....	200.00
January 11, 1938	N. A. B. P. Contribution.....	200.00
May 12	A. A. C. P. for Inspection of Two Colleges....	350.00
May 16	A. A. C. P. for Inspection of Nine Colleges....	1575.00
May 24	A. Ph. A. Contribution.....	200.00
June 21	U. of N. Carolina, Payment for Inspection....	175.00
July 19	U. of Illinois, Payment for Inspection.....	175.00
		<u>\$3448.94</u>

Expenditures:

December 20, 1937.	H. G. Roebuck & Son for Printing Booklet....	298.00
December 20	C. B. Jordan, Travel Expenses.....	68.70
December 20	Townes R. Leigh, Travel Expenses.....	38.70
December 22	University of Maryland, for Postage, etc.....	22.61
March 10, 1938	H. G. Roebuck & Son, Envelopes.....	4.75
March 10	A. G. DuMez, Meeting Expenses.....	4.95
March 21	Townes R. Leigh, Travel Expenses.....	72.20
March 21	C. B. Jordan, Travel Expenses.....	66.39
April 23	H. C. Christensen, Travel Expenses.....	46.80
May 12	A. G. DuMez, Travel Expenses.....	142.78
May 20	R. L. Swain, Travel Expenses.....	45.80
May 20	E. F. Kelly, Travel Expenses.....	44.75
May 28	A. C. Taylor, Travel Expenses.....	84.20
May 28	C. B. Jordan, Travel Expenses.....	114.75
May 28	H. C. Christensen, Travel Expenses.....	183.43
June 9	Townes R. Leigh, Travel Expenses.....	130.13
August 1	A. G. DuMez, Postage, etc.....	15.37
	Balance.....	<u>\$1384.31</u>
		<u>\$2064.63</u>

SPECIAL MEETING OF THE COUNCIL.

A special meeting of the Council was held on August 25, 1938, at the request of the Syllabus Committee.

At this meeting, the following proposals were submitted by H. M. Burlage, E. Fullerton Cook and E. V. Lynn, the representatives of the Syllabus Committee:

1. That the Council appoint a Committee to coöperate with the Syllabus Committee in the preparation of the Syllabus.
2. That the Council set a date on which the Syllabus will become an obligatory part of its standards for accreditation of colleges.

After a thorough and extended discussion on these proposals, in which all of those present participated, the representatives of the Syllabus Committee withdrew and the Council went into executive session, at which the following decision was reached:

The Council will cooperate with the Syllabus Committee in the revision of the Syllabus with the view to making the New Edition an obligatory part of its standards for accreditation in the future."

COMMITTEE ON THE STATUS OF PHARMACISTS IN THE GOVERNMENT SERVICE.—Chairman H. Evert Kendig read the report of this committee, which was accepted, with thanks.

"This Committee can again report steady progress in its efforts to improve the services rendered by pharmacists in the various divisions of the national government to which they are eligible and to improve the status of these pharmacists.

In its report submitted at the last annual meeting, the Committee reviewed the progress made during the preceding ten years and also set out the approximate number of pharmacists in the various government services and their status. No change of importance has occurred since that report, with the two exceptions referred to below.

Medical Administrative Corps, U. S. Army.—A second examination was held in December 1937, to fill ten vacancies in this corps to which only pharmacists are eligible.

Prior to this examination, Dr. Ernest Little, as chairman of the Executive Committee of the A. A. C. P., was kind enough to write to the Dean of each member School calling attention to the importance of promptly filling the existing vacancies and requesting their cooperation in bringing the examination to the attention of those graduates who would be interested and would probably meet the exacting requirements.

91 applicants met the requirements and were admitted to the examinations; 3 withdrew, and of the remainder, 57 failed the physical examination, 26 failed the other examinations and 5 were commissioned. This gives a total of 7 officers in this corps as the result of two examinations.

In a letter recently received from Surgeon General C. R. Reynolds and which will be read in full at the First General Session of the A. PH. A., the following very encouraging comments are made:

'I am happy to say that the appointees, of which there have been seven, have made a splendid impression on the military establishment and are receiving training in their general military duties as officers of the Army, to be followed by assignments in the field of instruction and the laboratory and supply services. I believe the pharmaceutical service of the Army will be greatly improved by these officers and the instruction of assistants will be placed on a more scientific and thorough-going standard. We intend to train and employ the pharmacists who are appointed in the Medical Administrative Corps in a manner similar to that obtaining in several continental armies where the pharmacist as a commissioned officer is doing much toward the scientific development of the medical service in general.'

A third examination is scheduled for November 14-18, 1938, to fill nine vacancies and it is very important that all of the vacancies be filled. If so, the first quota of sixteen will be filled and a further quota can be requested. Furthermore, if this quota is acceptably filled, it will further our efforts in other directions, especially in the Navy. The assistance of the deans and other officials of the schools and colleges is earnestly requested and it should be noted that no applications will be received after October 29, 1938. Copies of the official release and of the A. PH. A. Bulletin are attached.

Civil Service.—The A. PH. A. has recently been requested to furnish additional information with respect to the education and training of pharmacists and the impression is gained that further consideration is being given to the requirements for pharmacists who enter the government employ through Civil Service examination and to the possible establishment of additional classifications for pharmacists in the Professional and Scientific Service. Classes 1 and 2 are all so far established.

These developments would be of importance not only because of the improved status and pay of pharmacists now under Civil Service but also because additional positions and personnel will be provided. The legislation recently enacted by Congress is almost certain to lead to an increase in personnel including well-trained pharmacists. Again the interest and assistance of school officials and others are requested in seeing that Civil Service examinations are brought to the attention of qualified graduates.

In general, it can now be said that basic legislation and other provisions have been secured for the recognition of pharmacists as professional persons and for the improvement of pharmaceuti-

cal service in every division of the government to which pharmacists are eligible and that these efforts will, without doubt, lead to an increase in the employ of pharmacists through new positions and increase in the number employed. It has already been indicated that pharmacists in certain divisions will be requested later to take on additional duties which will require increased personnel. It is now our objective to see that the basic legislations and other provisions are extended and improved and that additional grades and positions are established as experience may indicate to be necessary or advisable.

However successful we may be in these efforts, success is dependent on the character and qualifications of the pharmacists who enter the government service either through commissions or through the Civil Service, and our program must include greater attention to the training and selection of those who represent our profession. The Committee trusts that these positions and duties be given careful consideration in the pharmaceutical curricula and in the revision of the Syllabus.

Members appointed by the A. P. H. A.

H. Evert Kendig, *Chairman*
B. Tappan Fairchild
F. L. McCartney

Members appointed by the A. A. C. P.

Andrew G. DuMez
William G. Crockett
Frank H. Eby
Wortley F. Rudd

Members appointed by the N. A. B. P.

A. L. I. Winne
Robert L. Swain
Russell Meadows."

COMMITTEE ON DEGREES.—Chairman Charles B. Jordan presented the report of the Committee with the following comment:

"This report is signed by the members of the Colleges, Dean Little and myself, and has been submitted to Mr. Mac Childs, who acted as chairman of the Boards Committee, but I have not yet heard from him. I haven't had an opportunity to discuss it with him. He has seen the report, and I hope he has no objection. I want it understood that this report is from the Colleges' side of the committee.

This Joint Committee was appointed at the Dallas meeting in 1936, and reported at the Joint Session of the American Association of Colleges of Pharmacy, National Association of Boards of Pharmacy and AMERICAN PHARMACEUTICAL ASSOCIATION held in the Hotel Pennsylvania, New York City, Tuesday, August 17, 1937. (The JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION, 26, 1-48 (1937), 11.) Quoting from that report:

'The Committee offers the following resolutions:

First: That Pharmacy adopt a specific professional degree and that this degree be Doctor of Pharmacy.

Second: That the degrees and requirements for the same, as specified in the present By-Laws of the American Association of Colleges of Pharmacy, except in so far as reference made to the degree of Doctor of Pharmacy is concerned, be retained.'

May we explain that in the By-Laws of the American Association of the Colleges of Pharmacy, the statement is made that the Doctor of Pharmacy degree cannot be granted for work in courses. We are trying to eliminate that clause in order to make way for a specific degree. Therefore, this last resolution reads this way, if I may read it again, 'That the degrees and requirements for the same, as specified in the present By-Laws of the American Association of Colleges of Pharmacy, *except in so far as reference made to the degree of Doctor of Pharmacy is concerned*, be retained.

We are offering the third recommendation for discussion, and this is the recommendation:

That colleges of Pharmacy be permitted and urged to offer a carefully planned curriculum of five or more collegiate years' duration, and that the degree of Doctor of Pharmacy be granted for the successful completion of such a curriculum.

During the past year, your Committee has been busy following up the work of the previous year. A circular letter was sent to twenty-seven deans of colleges of pharmacy, selected to represent all types of colleges and to represent both Association and Non-Association colleges. This circular letter called attention to the report of this Committee and asked for comment on the same. That there is a great interest in this subject of degrees in Pharmacy is attested to by the fact that every dean so addressed replied to the circular letter.

Time will not permit your Committee to report, even in abstract, these replies but they can be summed up as follows: Seven deans favored the report of your Committee, five were lukewarm to it or suggested modifications of the requirement for the Doctor of Pharmacy degree so that two years or more beyond the baccalaureate degree would be required for its completion and fifteen deans were opposed to the establishment of a professional degree *at this time*. Several of these fifteen suggested that a professional degree for Pharmacy should be adopted at some future date, but that we should wait until the B.S. and M.S. degrees in Pharmacy were more firmly established before we adopt a professional degree.

These replies were circulated among the membership of the Joint Committee so that all had an opportunity to read them. Your Committee believes that these twenty-seven deans represent a good cross section of all colleges of pharmacy and therefore interpret these replies to mean that the colleges of pharmacy are not ready to accept a professional degree *at this time*.

Although your Committee still believes that the adoption of a strictly professional degree for Pharmacy, similar to the professional degrees for Medicine, Dentistry and Veterinary Science, will be a wise step to take and will be of great value to our profession, we fully realize that any attempt on the part of this Joint Session to force such a degree on the colleges, when a majority of them oppose it, would be unwise. Therefore, your Committee recommends that the discussion of this subject before the Joint Session be discontinued for the present and that your Committees be discharged by the bodies that created them."

The report was accepted.

COMMITTEE ON MODERNIZATION OF PHARMACY LAWS.—Chairman R. L. Swain read a report of the Committee, which was accepted. In reply to an inquiry as to when the proposed legislation would be available, Chairman Swain stated that it was the hope of the Committee to make this available during the month of November, possibly earlier.

"The Committee for 1938 was as follows: Robert L. Swain, *Chairman*, Baltimore, Md.; Robert C. Wilson, Athens, Ga.; Arthur D. Baker, Denver, Colo.; E. J. Prochaska, Pine City, Minn.; S. H. Dretzka, Milwaukee, Wis.

It will be recalled that this Committee presented a comprehensive report to the 1937 meeting of the AMERICAN PHARMACEUTICAL ASSOCIATION. That report dealt, more or less, with the philosophical basis of pharmaceutical legislation and at the same time pointed out some practical means whereby the modern trends in pharmaceutical education and public health might be reflected in pharmaceutical legislation.

This report has been widely publicized. It appeared in the October issue of the *American Journal of Pharmaceutical Education*, the November issue of the JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION, the Proceedings of the National Association of Boards of Pharmacy, and reprints of the report as it appeared in the JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION were mailed to every Board of Pharmacy of the United States, as well as to many other interested persons.

Reference to the report has been made in other pharmaceutical publications, so it would appear that the Committee's views, in so far as they are reflected in the report delivered last year, have been fairly well disseminated. It is the desire of the Committee that the report submitted this year shall be looked upon as an extension of last year's report and not in derogation of it. This report will, therefore, not seek to duplicate or restate any of the points discussed in the 1937 report, but rather will deal with a limited number of particular topics.

It was the hope of the Committee that it would be possible, on the basis of the views expressed last year, to submit to this convention a tentative draft of a modernized pharmacy act. Several members of the Committee have cooperated closely with the chairman during the year and the chairman himself has devoted a great deal of time and attention to the work. However, due to a number of circumstances, most of which were utterly beyond the control of the chairman or

the Committee members, it will not be possible to submit the draft at this meeting, although it is confidently hoped to have it ready and available some time this fall.

Pharmacy acts, without exception, exclude physicians, dentists and veterinarians from their provisions when engaged in compounding and dispensing their own prescriptions and a few go so far as to permit these professional practitioners to supply their patients any medicinal compounds and preparations which to them may seem fit and proper.

Practically all pharmacy laws exempt wholesale druggists from their requirements and with few exceptions, make no attempt to control the manufacture of drugs and medicines. It is well to keep these sweeping exemptions in mind while attempting to rationalize this whole field of pharmaceutical legislation.

A study of the present pharmacy laws displays a uniform hope that through them a satisfactory control over the distribution of drugs, medicines and poisons might be attained but such a study also shows that this control is one of hope only, as the acts contain provisions which, in many states at any rate, practically emasculate the laws themselves.

While pharmacy acts are designed solely to regulate and control the practice of pharmacy and the compounding and dispensing of drugs, medicines and poisons, only a few attempt to define drugs, medicines or poisons in specific language, and a much smaller number have sought to define the practice of pharmacy. In other words, the Committee feels that pharmacy laws suffer from a failure or inability to basically define the subject matter upon which the act is to operate. This point is graphically brought out by a study of the definitions of the word "pharmacy" as they appear in the pharmacy acts of the several states.

DEFINITIONS OF THE TERM "PHARMACY" AS FOUND IN STATE PHARMACY ACTS.

Simply as a matter of convenience, the definitions of the word "pharmacy," as they appear in the various state pharmacy laws, are set out in the following quotations from the pharmacy acts themselves. No attempt has been made to include the exact definition found in every state law because many of them admit of classification under one general heading and the differences are slight and largely a matter of language only. It is urged that these definitions be studied as they support the contention that pharmacy laws are defective in the matter of basic definitions.

Alabama.—"Pharmacy," when not otherwise specifically designated "Apothecary Shop" or "Drug Store," shall for the purpose of this Act, mean a place registered by the Board of Pharmacy, where drugs, medicines, prescriptions, chemicals or poisons are compounded, dispensed or retailed.

Arizona.—(See Maryland.)

Arkansas.—"Pharmacy," when not otherwise limited, means the place registered by the Board in which drugs, chemicals, medicines, prescriptions and poisons are compounded, dispensed or sold at retail.

The definitions of the word "pharmacy" as found in the pharmacy acts of the following states, closely resemble that of Arkansas: Maine, New Hampshire, New York, Oregon, South Dakota.

California.—(See Maryland.)

Colorado.—(See Delaware.)

Connecticut.—(See Delaware.)

Delaware.—In many pharmacy acts the words "pharmacy" or "drug store" are not defined although, in discussing the duties, rights and privileges of the pharmacist, it might be said that a definition is attempted by indirection at any rate. A clear illustration of this is to be found in the Delaware Pharmacy Law from which the following quotation is taken:

"It shall be unlawful for any person not licensed as a pharmacist within the meaning of this chapter to conduct or manage any pharmacy, drug or chemical store, apothecary shop or other place of business, for the retailing, compounding or dispensing of any drugs, chemicals or poisons, or for the compounding of physicians' prescriptions, or to keep exposed for sale at retail any drugs, chemicals or poisons, except as in this chapter provided."

The pharmacy laws of the following states closely resemble that of Delaware:

Colorado

District of Columbia

Minnesota

Missouri

North Carolina

Oklahoma

Florida	Mississippi	Rhode Island
Idaho	Montana	South Carolina
Indiana	Nevada	Washington
Kansas	New Jersey	Wyoming
Kentucky	New Mexico	Connecticut

District of Columbia.—(See Delaware.)

Florida.—(See Delaware.)

Georgia.—The term “drug store,” “pharmacy” or “apothecary,” wherever used in this Act, shall be construed to mean a place where drugs, medicines, or poisons are dispensed, compounded or sold at retail under the direction and direct supervision of a person who is duly licensed and registered by the Georgia Board of Pharmacy to practice in Georgia.

Idaho.—(See Delaware.)

Illinois.—The term drug store or pharmacy shall for all purposes of this Act be construed to mean a shop, store or other place of business where drugs, medicines or poisons are compounded, dispensed or sold at retail.

Indiana.—(See Delaware.)

Iowa.—“Pharmacy” shall mean a drug store in which drugs and medicines are exposed for sale or sold at retail, or in which prescriptions of licensed physicians and surgeons, dentists, or veterinarians are compounded and sold by a registered pharmacist.

It is interesting to note that in Iowa an attempt is also made to define the practice of pharmacy in the following manner:

For the purpose of this title the following classes of persons shall be deemed to be engaged in the practice of pharmacy:

1. Persons who engage in the business of selling, or offering or exposing for sale, drugs and medicines at retail.
2. Persons who compound or dispense drugs and medicines or fill the prescriptions of licensed physicians and surgeons, dentists or veterinarians.

The Nebraska Act apparently does not define “pharmacy” but does define the “practice of pharmacy” substantially the same as in the Iowa Law.

The Vermont Act also attempts to define the practice of pharmacy in the following language:

The words “practice of pharmacy,” as used in this chapter, shall mean the compounding of physicians’ prescriptions and the preparation of ingredients therefor.

Kansas.—(See Delaware.)

Kentucky.—(See Delaware.)

Louisiana.—(See Maryland.)

Maine.—(See Arkansas.)

Maryland.—Every store or shop or other place where drugs, medicines or medicinal chemicals are dispensed or sold at retail, or displayed for sale at retail, or where physicians’ prescriptions are compounded, or which has upon it or displayed within it, or affixed to or used in connection with it, a sign bearing the word or words “Pharmacist,” “Pharmacy,” “Apothecary,” “Drug Store,” “Druggist,” “Drug,” “Medicines,” “Medicine Store,” “Drug Sundries,” “Remedies” or any word or words of similar or like import, or where the characteristic show bottles or globes filled with colored liquids or otherwise colored, are exhibited or any store or shop or other place, with respect to which any of the above words are used in any advertisement shall be considered a pharmacy, within the meaning of this sub-title.

The definitions of the word “pharmacy,” as found in the pharmacy acts of the following states, closely resemble that of Maryland:

Arizona California Louisiana Ohio Wisconsin

The pharmacy acts of many states prohibit the use of any of the words quoted in the Maryland Law, except by a bona fide pharmacy operated in conformity with the law, but do not utilize this method in defining a pharmacy or drug store.

Massachusetts.—In Massachusetts no attempt is made to define either “drug store” or “pharmacy” and the law apparently deals with the regulation of the “drug business.”

“Drug business,” under the Massachusetts Act is defined as follows:

"Drug business," as used in the two following sections, shall mean the sale, or the keeping or exposing for sale of drugs, medicines, chemicals or poisons, except as otherwise provided in section thirty-five, also the sale or the keeping or exposing for sale of opium, morphine, heroin, codeine or other narcotics, or any salt or compound thereof, or any preparation containing the same, or cocaine, alpha or beta eucaine, or any synthetic substitute therefor, or any salt or compound thereof, or any preparation containing the same, and the said term shall also mean the compounding and dispensing of physicians' prescriptions.

Michigan.—From and after the taking effect of this act, every place in which drugs, medicines or poisons are retailed or dispensed or physicians' prescriptions compounded, shall be deemed a pharmacy or drug store, and the same shall be in charge of and under the supervision of a registered pharmacist, and subject to the provisions of this act.

Minnesota.—(See Delaware.)

Mississippi.—(See Delaware.)

Missouri.—(See Delaware.)

Montana.—(See Delaware.)

Nebraska.—(See Iowa.)

Nevada.—(See Delaware.)

New Hampshire.—(See Arkansas.)

New Jersey.—(See Delaware.)

New Mexico.—(See Delaware.)

New York.—(See Arkansas.)

North Carolina.—(See Delaware.)

North Dakota.—Every store or shop where drugs, medicines or chemicals are dispensed or sold at retail, or displayed for sale at retail for medicinal purposes or where prescriptions are compounded, shall be deemed a "pharmacy" or "drug store" within the meaning of this Act.

Ohio.—(See Maryland.)

Oklahoma.—(See Delaware.)

Oregon.—(See Arkansas.)

Pennsylvania.—The term "pharmacy," when not otherwise limited, shall, for all the purposes of this act, be taken to mean a retail drug store, or any place where drugs, medicine or poisons are compounded, dispensed, prepared or sold at retail.

The definition of the word "pharmacy" as found in the Pharmacy Act of Utah, closely resembles that of Pennsylvania.

Rhode Island.—(See Delaware.)

South Carolina.—(See Delaware.)

South Dakota.—(See Arkansas.)

Tennessee.—It shall be unlawful for any person, not a registered pharmacist within the meaning of this chapter, to open or conduct any pharmacy, or any retail drug or chemical store as the proprietor thereof, unless he shall have in his employ and place in charge of such pharmacy or store such a registered pharmacist who shall have the supervision of that part of the business requiring pharmaceutical skill and knowledge, or to engage in the occupation of compounding or dispensing medicines on prescriptions of physicians, dentists or veterinarians, or to sell at retail, for medical purposes, any drugs, chemicals, poisons or pharmaceutical preparations until he has complied with the provisions of this chapter.

The Tennessee Act is unique in that it seems to recognize that there may be divisions or departments of a drug store which do not require the services of a registered pharmacist and for this reason the Act directs that a registered pharmacist shall have supervision over that part of the business requiring pharmaceutical skill and knowledge.

So far as the Committee is aware, this is the only pharmacy act of the United States which contains any such provision.

Texas.—A "pharmacy" or "drug store" as used in this Act is any store or place where drugs or medicines are sold or furnished in any bona fide manner at retail to the consumer wherein a registered pharmacist is continuously employed.

Utah.—(See Pennsylvania.)

Virginia.—The word "pharmacy" as used in this chapter shall include every place (except as hereinafter provided) in which drugs, medicines or poisons are retailed or dispensed, or are

displayed for sale at retail, or are kept in stock in other than manufacturers' or wholesalers' original packages, or in which physicians' prescriptions are compounded.

Washington.—(See Delaware.)

West Virginia.—It shall be unlawful for any person not a registered pharmacist within the meaning of this article, who does not employ a registered pharmacist within the meaning of this article, to conduct any pharmacy, drug store, apothecary shop or store for the purpose of retailing, compounding or dispensing medicines, poisons or narcotic drugs.

Wisconsin.—(See Maryland.)

Wyoming.—(See Delaware.)

A study of the foregoing definitions will show that in practically every instance the definitions are defective, mostly because of the limitations which the definitions impose.

It is believed that the term "pharmacy" should be defined broadly, and should be comprehensive enough to meet any and every situation met with in the distribution of drugs and medicines. For this reason the Committee desires to submit the following definition as, in its judgment, it really is a modern interpretation of "pharmacy" and also a modern interpretation of the term "drugs."

SUGGESTED DEFINITION FOR A PHARMACY. (TENTATIVE.)

The term "pharmacy" or "drug store" shall be held to mean and include every store or shop or other place where (1) drugs, which term shall include medicines or medicinal chemicals, are dispensed or sold at retail, or displayed for sale at retail, or (2) where physicians' prescriptions are compounded, or (3) which has upon it or displayed within it, or affixed to or used in connection with it, a sign bearing the word or words "Pharmacist," "Pharmacy," "Apothecary," "Drug Store," "Druggist," "Drugs," "Medicines," "Medicine Store," "Drug Sundries," "Remedies" or any word or words of similar or like import, or (4) where the characteristic show bottles or globes filled with colored liquids, or otherwise colored, are exhibited or (5) any store or shop or other place, with respect to which any of the above words are used in any advertisement.

The term "drug," as used in this section, means (1) articles recognized in the official United States Pharmacopœia, official Homeopathic Pharmacopœia of the United States, or official National Formulary, or any supplement to any of them; and (2) articles intended for use in the diagnosis, cure, mitigation, treatment or prevention of disease in man or other animals; and (3) articles (other than food) intended to affect the structure or any function of the body of man or other animals; (4) articles intended for use as a component of any articles specified in clause (1), (2) or (3); but does not include devices or their components, parts or accessories.

It is the belief of the Committee that the pharmacy acts should regulate the practice of pharmacy and the dispensing of drugs and medicines, not only in retail pharmacies and drug stores, but in hospitals, dispensaries and other similar institutions. For this reason the definition just quoted will be critically studied and if it is not the consensus of opinion that it is sufficiently broad to include hospitals and dispensaries, it will be recast so as to accomplish this specific purpose.

It will be noted that up to this point the Committee has not decided whether it is feasible to include devices under the general provisions of the pharmacy act. It is true that devices used in the cure, prevention, treatment and alleviation of diseases are now embraced within the purview of the Federal Food, Drug and Cosmetic Act, and study should be given to the matter to determine whether or not the pharmacy act should be broadened so as to include them within its general provisions.

CONTROL OF THE MANUFACTURING OF COSMETICS.

Some discussion should also be given to cosmetics, particularly as these commodities, too, are now the subject of regulation and control by the Federal Food, Drug and Cosmetic Act. It is believed that the manufacture of cosmetics should be surrounded with the same regulation and control as is given to the manufacture of drugs and medicines, and that if it has been found feasible to require manufacturers of drugs and medicines to operate under permits issued by the Board of Pharmacy, then it would seem logical to extend the pharmacy acts so as to require the manufacturers of cosmetics to operate under permits similarly issued.

Whether the state acts should go any further with respect to the regulation and control of the manufacture and distribution of cosmetics has not received much study at the hands of the Committee.

PROFESSIONAL AND TECHNICAL EQUIPMENT FOR DRUG STORES.

In recent years, largely under the impetus of the National Association of Boards of Pharmacy, much attention has been given to the facilities which the average drug store possesses for use in the practice of pharmacy. Surveys conducted by state boards have shown that in many instances the professional and technical equipment was extremely meagre and in some, absolutely inadequate.

In the light of this factual information, legislation has been proposed in several states to vest in the Board of Pharmacy the power to designate the minimum of such professional and technical equipment as in its judgment the daily practice of pharmacy would require. It is believed that this is a progressive step and that any modern pharmacy act should include this provision.

In order that this matter might be specifically available to those who are interested, the so-called minimum equipment provisions of the Maryland and Virginia Laws are incorporated herein. Maryland, so far as the Committee has been able to ascertain, was the first state to adopt legislation dealing with this subject and for this reason the following Maryland statute will be found of interest.

"Every registered pharmacy must be equipped with proper pharmaceutical utensils so that prescriptions can be properly filled and United States Pharmacopœia and National Formulary preparations properly compounded. The Maryland Board of Pharmacy shall prescribe the minimum of such professional and technical equipment which a pharmacy shall at all times possess. No permit shall be issued or continued for the conduct of a pharmacy until the provisions of this section shall have been complied with, and any person violating this section, shall, upon conviction, be deemed guilty of a misdemeanor and fined not more than fifty (\$50.00) dollars."

The minimum equipment provisions of the Virginia Act differ somewhat from the Maryland law and the Virginia Act is quoted here so that the contrast between the two statutes might be studied.

"Every registered pharmacy must be equipped with proper pharmaceutical utensils so that prescriptions can be properly filled and United States Pharmacopœia and National Formulary preparations properly compounded. The Virginia Board of Pharmacy shall prescribe the minimum of such professional and technical equipment which a pharmacy shall at all times possess, and such list shall include the latest revisions of the United States Pharmacopœia and the National Formulary. No permit shall be issued or continued for the conduct of a pharmacy until or unless the provisions of this paragraph have been complied with."

Minimum equipment laws have been passed in a number of other states but the Maryland and Virginia statutes may be looked upon as typical and as meeting the most modern view on the subject.

CONTROL OF THE MANUFACTURING OF DRUGS AND MEDICINES.

Persons, who have been giving real study to the modernization of pharmacy laws, feel that they should regulate and control the large scale production of drugs and medicines, to the same extent and to the same degree that they regulate and control the practice of pharmacy. No manufacturers of drugs and medicines, and this applies with equal force to cosmetics, toilet articles and dentifrices, should be permitted to operate without first having shown to the satisfaction of some public agency, that all manufacturing operations will be under the personal supervision of a registered pharmacist or other person whose qualifications for this work are deemed adequate and the manufacturer should also be compelled to show that his manufacturing facilities are sufficient and adapted to the manufacturing operations in which he seeks to engage.

In order to accomplish these ends, it has been suggested that all manufacturers of drugs, medicines, cosmetics, toilet articles and dentifrices should be required to operate under annual permits issued by the Board of Pharmacy, as it is felt that this type of regulation and control would be sufficient to restrict the manufacturing of these highly essential commodities to persons actually qualified to manufacture them, and at the same time would exclude from the field those obviously unfit.

It is interesting to note that this matter has been dealt with by legislation in at least three states, Maryland, Virginia and Texas, and each of these acts is reproduced here for the sake of convenience:

Maryland.—No drugs, or medicines, or toilet articles, or dentifrices or cosmetics shall be manufactured, made, produced, packed, packaged or prepared within this state, except under the

personal and immediate supervision of a registered pharmacist or such other persons as may be approved by the Maryland Board of Pharmacy after an investigation and a determination by the said Board that they are qualified by scientific or technical training and/or experience to perform such duties of supervision as may be necessary to protect the public health and safety; and no person shall manufacture, make, produce, pack, package or prepare any such articles without first obtaining a permit so to do from the Maryland Board of Pharmacy. Such permit shall be subject to such rules and regulations, with respect to sanitation and/or equipment, as the said Board of Pharmacy may from time to time adopt for the protection of the public health and safety.

The application for such permit shall be made on a form to be prescribed and furnished by the said Maryland Board of Pharmacy, and shall be accompanied by the required fee of one (\$1.00) dollar, which amount shall also be paid as the fee for each renewal of such permit. Separate applications shall be made and separate permits issued for each separate place of manufacture, making, production, packing, packaging or preparation.

Permits issued under the provisions of this section shall be exposed in a conspicuous place in the factory or place for which issued; such permits shall not be transferable; shall expire on the last day of December following the date of issue and shall be renewed annually.

Any person aggrieved by any rule or regulation promulgated by the said Board of Pharmacy under the provisions of this section shall be entitled to have his complaint set down for hearing by said board. Requests for such hearings shall be made in writing and shall specify in detail the basis for the complaint, and the hearing shall be held within ten (10) days from the date of the receipt of said request by the said board, unless postponed by mutual agreement.

The said board shall have the power to make such rules and regulations with respect to the conduct of such hearings as may be necessary.

Any person aggrieved by any order of the said Board of Pharmacy, passed after such hearing, may appeal therefrom to the Circuit Court of the county in which such person resides, and if such person is a resident of Baltimore City, to the Circuit Court of Baltimore City or the Circuit Court No. 2 of Baltimore City, any time within thirty (30) days after the passage of the said order; and upon said appeal, the court shall hear and determine the issues raised thereby de novo.

Any person, firm or corporation violating any of the provisions of this section, and any permittee hereunder who shall violate any of the conditions of his permit or any of the rules and regulations adopted by the said Maryland Board of Pharmacy in pursuance of the power hereby conferred, shall, upon conviction, be deemed guilty of a misdemeanor and fined not more than fifty (\$50.00) dollars for each offense, and each and every day such violation continues shall constitute a separate and distinct offense; and, upon conviction of a permittee hereunder, his permit shall also forthwith be revoked and become null and void.

Nothing in this section shall be construed to apply to those operating retail pharmacies or drug stores.

All permit fees collected under the provisions of this section shall be used by the Maryland Board of Pharmacy, so far as may be necessary, for the enforcement of the provisions of this subtitle.

Virginia.—No drugs, medicines, toilet preparations, dentifrices or cosmetics (except soaps for which no curative or therapeutic claims are made) shall be manufactured, made, produced, packed, packaged or prepared within this state, except under the personal and immediate supervision of a registered pharmacist or such other person as may be approved by the Virginia Board of Pharmacy after an investigation and a determination by the said board that they are qualified by scientific or technical training to perform such duties of supervision as may be necessary to protect the public health and safety (except that this provision shall not apply to manufacturers to whom were granted permits prior to January first, nineteen hundred and thirty-eight); and no person shall manufacture, make, produce, pack, package or prepare any such preparations without first obtaining a permit so to do from the Virginia Board of Pharmacy. Such permits shall be subject to such rules and regulations, with respect to sanitation and equipment, as the said board of pharmacy may from time to time adopt for the protection of the public health and safety.

Permits issued under the provisions of this section shall be exposed in a conspicuous place in the factory or place for which issued. Such permits shall not be transferable, shall expire on the last day of December following the date of issue, and shall be renewed annually.

The application for such permit shall be made on a form to be prescribed and furnished by the said Virginia Board of Pharmacy and shall be accompanied by the required fee of five (\$5.00) dollars, which amount shall also be paid as the fee for each renewal of such permit. Separate applications shall be made and separate permits issued for each separate place of manufacture, making, production, packing, packaging or preparation.

The Virginia Board of Pharmacy may revoke a permit for failure to comply with its rules and regulations promulgated pursuant to the provisions of Section one hereof. Any person aggrieved by any action taken by the said Board of Pharmacy under the provisions of this act shall be entitled to have his complaint set down for hearing by said board. Requests for such hearings shall be made in writing and shall specify in detail the basis for the complaint, and the hearing shall be held within ten (10) days from the date of the receipt of said request by the said Board, or its authorized agent, unless postponed by mutual agreement.

Any person aggrieved by any order of the said Board of Pharmacy, entered after such hearing, may appeal therefrom to a court of record of the place of his residence, at any time within thirty (30) days after the entrance of the said order; and upon said appeal, the court shall hear and determine the issues raised thereby de novo.

Any person, firm or corporation, except a registered pharmacy, who shall manufacture, make, produce, pack, package or prepare within this state drugs, medicines, toilet preparations, dentifrices or cosmetics without a permit or after revocation thereof, shall be fined not less than fifty (\$50.00) dollars, nor more than five hundred (\$500.00) dollars for each offense.

Nothing in this section shall be construed to apply to the proprietor of a registered pharmacy.

Texas.—Every person, firm or corporation desiring to continue operating a retail pharmacy or drug store in this state, as the same is defined herein, and every manufacturer of drugs and medicines as defined herein, after the passage of this Act shall procure from the Board a permit for each store or factory to be operated by making within six (6) months application to the Board upon a form to be furnished by said Board, setting forth under oath ownership and location, and the name, with the certificate number, of the pharmacist registered in this state, or physician, dentist, veterinarian or chiropodist who is to be continuously employed by the pharmacy or drug store or factory, provided that the Board may in its discretion refuse to issue such permit to such applicant unless furnished with satisfactory proof that said applicant is engaged in the business of conducting a pharmacy, drug store or factory for the purpose of manufacturing drugs; provided further that at any time after the issuance of a permit by the Board to such applicant, the Board may revoke or cancel the permit when satisfactory proof has been presented to such Board that said permit holder is not conducting a bona fide pharmacy or drug store. The permit provided for herein shall be issued annually by the Board upon receipt of proper application accompanied by a fee of two dollars (\$2.00); this permit to be displayed conspicuously at all times in the store or factory of original issue. Every person, firm or corporation desiring to open a new pharmacy, drug store or factory shall procure the permit before mentioned, before commencing business and the same discretionary powers may be used by the Board in passing upon such application. No more than one store or factory may be operated under one permit. In case of change of personnel of registered pharmacists, the Board shall be notified of such change within ten (10) days; provided that the same pharmacist's name shall not appear on more than one (1) permit.

EXEMPTION PROVISIONS OF STATE PHARMACY ACTS.

The so-called exemption provisions of the state pharmacy acts constitute the most difficult problem in the whole field of pharmaceutical legislation. There is a general unanimity of opinion with respect to professional standards and little opposition is met with when seeking to raise the levels of pharmaceutical education. In other words, there is general legislative concurrence in any desire on the part of pharmacy to better the professional service which it renders.

However, be the causes what they may, slight progress has been met with in placing the distribution of drugs and medicines in charge of the pharmaceutical profession and judged by the way the legislatures have dealt with this subject, it would appear that drugs and medicines are merely articles of commerce and trade. Of course, this situation is entirely at variance with the views held by public health administrators, medical men and the pharmaceutical profession at large.

Drugs and medicines are commercial products only in their incidental sense, as their primary purpose is for the treatment of disease. The view is growing that the unregulated and uncontrolled distribution of drugs and medicines constitutes a major public health problem as was graphically stated in a recent issue of the *New Hampshire Health News*, a monthly publication issued by the State Board of Health of New Hampshire: "The curtailment of the promiscuous sale of drugs by those not trained in the science of pharmacy can be put down as a definite public health need."

The most authoritative study of this subject was made by the Committee on the Cost of Medical Care, and in its final report, the Committee recommended legislation calling for much more stringent regulation of the manufacture and distribution of drugs and medicines. One substantial group in the Committee stated explicitly it would make the recommendation that only qualified pharmacists should be allowed to sell drugs and medicines.

In order that the present chaotic situation may be fully known, a number of the exemption provisions of the state pharmacy acts are incorporated in this report. They should be studied carefully and the facts disclosed made the basis of a determined effort on our part to bring these so-called exemption provisions more in line with current professional opinion. (It is not contended by the Committee that the following quotations from state laws show the full extent of the exemption provisions, as attempt has only been made to quote those portions dealing specifically with the rights and privileges of persons other than pharmacists to deal in some manner with drugs and medicines.)

In the following quotations from the state pharmacy acts it will be noted that there is no similarity in terminology. For instance, the following terms appear: "Board of Pharmacy," "board of pharmacy," "Epsom salts," "epsom salts," "Glauber's salts," "glauber's salts," "nitre," "niter," etc. This accounts for the lack of uniformity in the language of the different laws.

Alabama.—Provided, however, that nothing herein contained shall be construed to prevent the sale of patent or proprietary medicines or remedies, which do not contain opium or cocoa leaves, or any compound, manufacture, salt, derivative or preparation thereof, when sold at retail in original packages.

The exemption provisions as found in the pharmacy acts of Utah and Illinois closely resemble those of Alabama.

Arizona.—The Arizona Act passed in 1935, provides for the annual registration of pharmacists under permits and also provides "for a proprietary or patent medicine permit which shall be issued to those persons, firms, co-partnerships or corporations, applying for registration under the provisions of this section, to sell, retail, stock, expose or offer for sale in this state, patent or proprietary medicines, in the original package only, and such persons, firms, co-partnerships or corporations so registered and licensed, shall be limited to stocking, exposing for sale or offering for sale, patent and proprietary medicines in the original package, but such permittees shall not be limited to or required to conduct such business at any fixed place."

The act does not appear to define patent or proprietary medicines.

Under the Arizona statute provision is made for the Board to issue permits to rural dealers. Simply that this type of legislation might be available, the following paragraph taken from the Act is included herein:

"The Board of Pharmacy shall issue a permit to any and all general dealers wishing to deal in the simple household remedies mentioned elsewhere in this section; and said permit shall authorize the person or firm named therein to sell in such locality, but not elsewhere, and under such regulations and restrictions as said Board may from time to time adopt, in such manner and form as may be authorized by said board, the following simple household remedies and drugs, to wit:

"Tincture of arnica, spirits of camphor, almond oil, distilled extract witch-hazel, syrup of ipecac, syrup of rhubarb, hive syrup, sweet spirits of nitre, tincture of iron, epsom salts, Rochelle salts, senna leaves, carbonate of magnesia, seidlitz powders, quinine, cathartic pills, chamomile flowers, caraway seed, chlorate of potash, moth balls, plasters, salves, ointments, peroxide of hydrogen, gum camphor, blue ointment, asafetida, saffron, anise seed and saltpeter, and such other remedies or drugs as the board may from time to time designate."

"Provided such permit shall not authorize any such dealer to compound or prepare any prescription or do any of the things herein particularly given to a licensed pharmacist."

The exemption provisions as found in the Pharmacy Acts of Nevada and California, closely resemble those of Arizona. In California, however, "the permittee must be not less than three miles distant from the store of a registered pharmacist."

Arkansas.—The provisions of this Act shall not apply to the sale of drugs or medicines when intended for agricultural, technical and industrial use; nor to the sales by wholesale druggists, wholesale or retail grocers, or other wholesale or retail dealers or manufacturers of proprietary medicines in original packages; nor to the sales of those drugs commonly known as "grocer's drugs" in original packages when put up under the direction of a registered pharmacist of this or some other state.

California.—(See Arizona.)

Colorado.—From and after the passage of this Act, it shall be lawful for licensed drug dealers to keep for sale and to sell in original sealed packages such emergency drugs, medicines and poisons which shall from time to time be designated by the State Board of Pharmacy as emergency needs under a drug dealer's license. A licensed drug dealer is defined to be a person of good moral character and not less than twenty-one (21) years of age, who conducts a fixed place of business located not less than five (5) miles from a licensed pharmacy, and who is registered by the Board of Pharmacy to sell in original sealed packages such emergency drugs, medicines and poisons as the Board shall from time to time designate.

Connecticut.—Any store, not licensed as a pharmacy, may sell, in original packages put up by a licensed pharmacist whose name and business address shall be displayed upon the package, any drugs, chemicals or medicinal compounds or preparations, when a permit to do so shall have been obtained from said commission.

Delaware.—Provided, however, that nothing in this section shall be construed to interfere with the selling at retail of non-poisonous domestic remedies nor with the sale of patent or proprietary preparations, nor with the sale of poisonous substances which are sold exclusively for use in the arts, or for use as insecticides, when such substances are sold in unbroken packages bearing a label having plainly printed upon it the name of the contents and the word poison.

District of Columbia.—And provided further, that persons other than registered pharmacists may sell household ammonia and concentrated lye, in sealed containers plainly labeled, so as to indicate the nature of the contents, with the word "poison," and with a statement of two or more antidotes to be used in case of poisoning, and may sell bicarbonate of soda, borax, cream of tartar, olive oil, sal ammoniac and sal soda; and persons other than registered pharmacists may, furthermore, sell in original sealed containers, properly labeled, such compounds as are commonly known as "patent" or "proprietary" medicines, except those the sale of which is regulated by the provisions of Sections 201 and 203 of this title.

Florida.—Nothing in this Chapter shall apply to the sale by merchants of Paris green, white hellebore and other poisons for destroying insects or to the sale of any substance for the use in the arts, or to the sale of ammonia, asafetida, alum, bicarbonate of soda, borax, camphor, castor oil, cream of tartar, dye stuffs, essence of ginger, essence of peppermint, essence of wintergreen, non-poisonous flavoring essences or extracts, glycerin, licorice, olive oil, sal ammoniac, saltpetre, sal soda, sulfur, blue vitriol, brimstone, pepper, sage, senna leaves, sweet oil, spirits of turpentine, paregoric, Glauber's salts, epsom salts, hive syrup, syrup of ipecac, tincture of arnica, syrup of tolu, syrup of squills, spirits of camphor, sweet spirits of nitre, quinine and all other preparations of cinchona bark, tincture of aconite, and tincture of iron, compound cathartic pills, and other household remedies, and merchants may sell in the original bottle, box or package, any drugs, medicines, chemicals, essential oils, or tinctures, which are put up by pharmacists in bottles, boxes or packages bearing a label securely affixed, which label shall bear the name of the pharmacist putting up the same, the dose that may be administered to persons three months, six months, one year, three years, five years, ten years, fifteen years and twenty-one years of age, and if a poison, the name or names of the most prominent antidotes. Such merchants may sell any patent or proprietary medicines.

Georgia.—This item shall be construed in the interest of the public health and shall not be construed to prohibit the sale by merchants of home remedies, not poisons, or the sale by merchants of preparations commonly known as patent or proprietary preparations when sold only in the original and unbroken packages, Paris green, arsenate of lead or preparations containing any of these articles used for killing Lincoln bugs, cabbage worms, caterpillars, all and similar insects,

provided the labels, cartons and packages containing such preparations have the word "POISON" printed across the face, and conform to the United States Pure Food and Drug Act, and general merchants other than druggists shall not be required to register under the provisions of this Act.

Idaho.—Provided, however, that nothing in this section shall be construed to interfere with the selling at retail of domestic non-poisonous remedies; nor with the sale of patent or proprietary preparations which do not contain poisonous ingredients.

The exemption provision of the North Carolina Pharmacy Law closely resembles that of Idaho.

Illinois.—(See Alabama.)

Indiana.—Provided, that nothing in this act shall apply to, nor in any manner interfere with the business of a general merchant in selling any of the following articles, to-wit: Medicines of secret composition, and which are advertised to the general public and popularly known as patent or proprietary medicines, providing said medicines are not poisonous. Also concentrated lye, sodium carbonate, sodium bicarbonate, tobacco, spices, perfumes, flavoring extracts, borax and the following articles in original and unbroken packages, bearing the label of a known pharmaceutical manufacturer, wholesale druggist or of a registered pharmacist, to-wit: Paregoric, hive syrup, spirit of camphor, tincture of arnica, epsom salt, quinine sulfate, compound cathartic pills, Paris green, London purple, white hellebore and such insecticides, disinfectants, dyestuffs and other chemicals as may be allowed by the Board of Pharmacy.

Iowa.—(See Nebraska.)

Kansas.—The Kansas Pharmacy Act specifically states that while a physician may "compound his own prescriptions and supply to his patients such articles as may be fit, proper and necessary, the drugs and medicines dispensed by him shall comply with the Kansas Food and Drug Law and be subject to inspection as provided in said law."

The Board of Pharmacy, under the Kansas Act, "is authorized and directed to make and publish uniform rules and regulations which rules and regulations may include, if necessary, for the proper execution of this law, the collection and examination of drugs kept for sale, offered for sale, dispensed or sold, in the State of Kansas, by any pharmacist or kept in stock by any physician, merchant or dispenser."

"It shall be lawful for retail dealers to sell the usual domestic remedies and medicines in unbroken packages."

Kentucky.—Nothing in this act shall be construed as to apply to, or in any manner interfere with, the sale of the usual non-poisonous domestic remedies and medicines, and patent or proprietary medicine, by country stores in small places or rural districts.

Louisiana.—Nothing contained in this Act shall in any manner whatever interfere with the making and dealing in proprietary remedies, popularly called patent medicines, nor prevent store keepers from dealing in and selling the commonly used standard medicines and poisons, if all such standard medicines and poisons included in this Section conform in all respects to the requirements of Section 7 (9639). Nor shall this Act apply to any planter furnishing medicines to hands in his employment or leasing lands from him.

Maine.—This chapter shall not apply to physicians who prepare and dispense their own medicines, nor to the sale of non-poisonous domestic remedies and patent or proprietary preparations usually sold by grocers and others.

Maryland.—Nothing in this sub-title shall be so construed as to prevent, or in any way make unlawful, or interfere with, the sale or display by general merchants, of any proprietary or patent medicines; or the sale by such general merchants of commonly used household or domestic remedies, in original, unopened packages, or farm remedies or ingredients for spraying solutions, in bulk or otherwise, provided the said household or domestic remedies are clearly labeled with the ordinary name of the article or articles contained therein and the name of the manufacturer or distributor thereof, or the sale by such general merchants of doses of household or domestic remedies to be consumed upon the premises.

Massachusetts.—Sections thirty and thirty-seven to forty-one shall not apply to the manufacture of patent and proprietary medicines, nor to the sale of such medicines other than the sale at retail of those intended for internal use which contain barbituric acid; nor to the sale by merchants at retail of the following drugs and chemicals used in the arts,

or as household remedies; alum, ammonia, bicarbonate of soda, borax, camphor, castor oil, chlorinated lime, citric acid, cod liver oil, copperas, cotton seed oil, cream of tartar, dyestuffs, Epsom salts, flaxseed, flaxseed meal, gelatine, ginger, Glauber's salt, glycerin, gum arabic, gum tragacanth, hops, hyposulfite of soda, licorice, lime water, linseed oil, litharge, magnesia, olive oil, peroxide of hydrogen, petrolatum, phosphate of soda, rhubarb, Rochelle salt, rosin, sal ammoniac, saltpeter, senna, slippery elm bark, spices for seasoning, sugar of milk, sulfate of copper, sulfur, tartaric acid, turpentine, extract of witch-hazel and zinc oxide; nor to the sale in the original packages of the following, if put up by registered pharmacists, manufacturers or wholesale dealers in conformity with law; flavoring essences or extracts, essence of Jamaica ginger, insecticides, rat exterminators, aromatic spirits of ammonia, spirits of camphor, sweet spirits of niter, syrup of rhubarb, tincture of arnica and tincture of rhubarb; nor to the sale of the following poisons used in the arts, if properly labeled and recorded as provided by Section two of Chapter two hundred and seventy: muriatic acid, oxalic acid, nitric acid, sulfuric acid, arsenic, cyanide of potassium, mercury, phosphorus and sulfate of zinc.

Michigan.—Nothing in this act shall apply to the sale by merchants of ammonia, bicarbonate of soda, borax, camphor, castor oil, cream of tartar, dye stuffs, essence of ginger, essence of peppermint, essence of wintergreen, non-poisonous flavoring essence or extracts, glycerin, licorice, olive oil, sal ammoniac, saltpetre, sal soda and sulfur, except as herein provided: Provided, however, that in the several towns of this state, where there is no registered pharmacist within five miles, physicians may compound medicines, fill prescriptions and sell poisons, duly labeling the same as required by this act, and merchants and drug dealers may sell any drugs, medicines, chemicals, essential oils and tinctures which are put up in bottles, boxes, packages, bearing labels securely affixed, which labels shall bear the name of the pharmacist putting up the same, the dose that may be administered to persons three months, six months, one year, three years, five years, ten years, fifteen and twenty-one years of age, and if a poison, the name or names of the most prominent antidotes; and to the sale by such merchants of copperas, borax, Blue vitriol, saltpetre, pepper, sulfur, brimstone, Paris green, licorice, sage, senna leaves, castor oil, sweet oil, spirits of turpentine, glycerin, Glauber's salts, epsom salts, cream of tartar, bicarbonate of soda, sugar of lead and such acids as are used in coloring and tanning, paregoric, essence of peppermint, essence of ginger, essence of cinnamon, hive syrup, syrup of ipecac, tincture of arnica, syrup of tolu, syrup of squills, spirits of camphor, sweet spirits of nitre, quinine and all other preparations of cinchona bark, tincture of aconite and tincture of iron or quinine pills, and to the sale of carbolic acid, laudanum, sugar of lead, oxalic acid, duly labeling and registering the same as required by this act; and to the sale of any patent or proprietary medicines.

Minnesota.—Nothing in the subdivision, however, shall prevent or interfere with the making or vending of proprietary medicines, with any exclusively wholesale business, or with the sale by general retail dealers of the following articles: Alum, Blue vitriol, borax, carbonate of ammonia, carbonate of soda, castor oil, copperas, epsom salts, Glauber's salts, glycerine, gum arabic, gum camphor, licorice, logwood, rolled sulfur, saltpetre, senna leaves, sublimed sulfur, water of ammonia, arsenate of lead, sodium arsenate, London purple, arsenious oxide or Paris green in sealed packages distinctly labeled "arsenate of lead," "sodium arsenite," "London purple," "arsenious oxide," "arsenate calcium and arsenite of zinc" or "Paris green," as the case may be, "poison." Nor shall any dealer whose shop is more than two miles from a drug store be thus prevented from selling any commonly used medicine or poison which has been put up for such sale by a registered pharmacist.

Mississippi.—Provided, that nothing in this act shall be construed to prevent or in any manner interfere with, or to require a permit for the sale or offering for sale of patent or proprietary medicines; nor interfere with nor prevent the sale of commonly used household drugs by general stores; nor prevent the sale of such acids, poisons or chemicals as are regularly used in agriculture.

Missouri.—Provided, however, that nothing in this section shall be so construed as to apply to the sale of patent and proprietary medicines, and in any locality where there is no licensed pharmacist or assistant pharmacist, the ordinary household remedies and such drugs or medicines as may be specified by the board of pharmacy shall be permitted to be sold by those engaged in the sale of general merchandise.

Montana.—Provided, that nothing in this act shall interfere with the business of merchants in towns where there is no regularly licensed pharmacist when selling drugs, medicines, pharmaceutical or proprietary medicinal preparations in original and plainly labeled packages, as the public may require; provided also, that nothing herein shall be construed to prevent the sale of any patent or proprietary medicine in the original package, when plainly labeled, nor such non-medicinal articles as are usually sold by general merchants.

Nebraska.—The preceding section shall not be construed to include.: 4. Persons who sell, offer or expose for sale patent or proprietary medicines, the sale of which is not in itself a violation of the law relating to intoxicating liquors.

The exemption provision of the Iowa Act closely resembles that of Nebraska.

Nevada.—(See Arizona.)

New Hampshire.—This shall not prevent the sale of proprietary medicines except those proprietary medicines which consist of or contain barbitol and/or other compounds of the barbituric acid series, by whatever names called.

This chapter shall not prevent the sale by any dealer of the following named drugs, medicines and chemicals in original packages only which have been put up by or under the direction of a registered pharmacist of this or some other state: Compound licorice powder, Rochelle salts, sodium phosphate, extract of witch-hazel, tincture of arnica, tincture of iodine, tincture of rhubarb, chloroform liniment, sweet spirits of nitre, aromatic spirits of ammonia, oxide of zinc ointment, essence of peppermint, essence of wintergreen, hydrogen peroxide and camphor liniment, nor of pills or tablets of quinine sulfate, extract of cascara, cathartic compound, sodamint, sodamint and pepsin and potassium chlorate.

This chapter shall not prevent the sale of the following: Alum, blue vitriol, borax, camphor gum, copperas, Epsom salts, Glauber's salts, castor oil, oil of turpentine, sulfur, cottonseed oil, saltpetre, household ammonia, flavoring extracts and unofficial chlorinated solutions.

New Jersey.—Nothing in this act shall be so construed to apply to or in any manner interfere with the making and vending of non-poisonous patent or proprietary medicines, nor with the sale of simple non-poisonous domestic remedies by retail dealers in rural districts.

New Mexico.—Under the conditions hereinafter imposed merchants, and storekeepers in towns, villages and camps, where there is no registered pharmacist, may and they are hereby authorized and permitted to sell at retail, patent or proprietary medicines, chemicals used in mining, the reduction of ores and assaying, poisons for the destruction of insect and animal pests and predatory animals and common household drugs, but all sales of poisons shall be subject to the provisions of Section 2378 (53-201) of the Codification of 1915.

New York.—Storekeepers may in accord with the rules sell medicine and poisons for a period not exceeding one year upon the payment of a fee of three dollars. The storekeeper's certificate is limited to the village or place where the storekeeper resides and may be limited to the sale of certain classes of poisons sold only in original packages and put up by a licensed pharmacist whose name and business address is displayed on the package.

North Carolina.—(See Idaho.)

North Dakota.—The exemption provision of the North Dakota Pharmacy Act is particularly interesting as the Board of Pharmacy of that State is vested with much greater discretionary powers than are usually met with in statutes of this kind. The Act states that "general dealers come under the provisions of this act so far as it relates to the keeping for sale and sale of proprietary medicines in original packages, and such simple household remedies as may from time to time be approved for such sale by the State Board of Pharmacy."

The Act also states that "the Board may issue permits to retail dealers to keep for sale and sell in original packages, in addition to the simple household remedies heretofore referred to, such other emergency medicines and poisons as may be deemed necessary and in the public interest, and which have been designated by the State Board of Pharmacy as saleable under such license The State Board of Pharmacy may likewise from time to time add to or eliminate from the approved list of simple household remedies, and may add to or eliminate from the approved list of emergency medicines and poisons, saleable under the license aforesaid, and notice of such alterations shall be given by publication in such manner as said Board may deem proper."

Ohio.—The next two sections shall not apply to the making or vending of patent or proprietary medicines by a retail dealer, the selling of copperas, borax, blue vitriol,

saltpetre, sulfur, brimstone, licorice, sage, juniper berries, senna leaves, castor oil, sweet oil, spirits turpentine, glycerine, glauber's salt, cream of tartar, bicarbonate of sodium, quinine, rochelle salts, epsom salts, alum, camphor, gum, oil of cinnamon, oil of lemon, or prohibit a person from selling in the original packages paregoric, essence of peppermint, essence of cinnamon, essence of ginger, hive syrup, syrup of ipecac, tincture of arnica, syrup of tolu, syrup of squills, spirits of camphor, number six, sweet spirits of nitre, compound cathartic pills, quinine pills and other similar preparations when compounded by a legally registered pharmacist and put up in bottles or boxes bearing the label of such pharmacist or of a wholesale druggist, with the name of the article and directions for its use on each bottle or box.

Oklahoma.—Provided, that nothing in this Act shall be construed to prevent or in any manner interfere with, or apply to the business of selling or the sale or offering for sale of patent or proprietary medicines; nor interfere with nor prevent the sale of the commonly used household drugs, provided such commonly used household drugs are offered for sale or sold in packages which have been put up for sale to consumers by pharmacists, manufacturing pharmacists, manufacturers or wholesale druggists, nor shall any of the provisions of this bill prohibit the selling direct to the consumers, any patent medicine or proprietary remedies, commonly used as household drugs nor shall this article interfere with the business of those merchants who keep or sell such poisons, acids and chemicals as are regularly used in agriculture, mining and the arts, when kept and sold for such purposes only in plainly sealed and labeled packages. Provided, further, that nothing in this Act shall in any manner interfere with the business of merchants in towns having less than three hundred inhabitants, in which there is no licensed pharmacy, or with country merchants, in selling or vending such medicines, compounds and chemicals as are required by the general public.

Oregon.—Provided, that nothing in this act shall apply to the manufacture or sale of proprietary medicines or patent medicines, except as hereinafter provided, nor to the sale of any household remedies and medicines, by shopkeepers not druggists, in the original packages, when properly labeled, except as hereinafter provided.

Pennsylvania.—Nothing in this act of Assembly shall be construed so as to prevent the sale or manufacture of proprietary medicines; nor prevent storekeepers from dealing in and selling commonly used household drugs or proprietary medicines when the same are offered for sale or sold in original packages, except when administered in single doses on the premises, which have been put up ready for sale to consumers by pharmacists, manufacturing pharmacists, manufacturers of proprietary medicines, wholesale grocers, or wholesale druggists, under qualified supervision: Provided, however, that the proprietary medicines or household drugs sold or offered for sale shall not contain any opium, coca leaves, chloral, or any of the salts, derivatives or compounds thereof in any quantity whatsoever: Provided, also, that remedial agencies that are administered hypodermically, intramuscularly or intravenously, and all medicinal substances containing barbituric acid or its compounds, and biologicals (except those biologicals distributed to state and county health officials), and medicines containing substances of glandular origin (except intestinal enzymes and all liver products), shall be sold only by registered pharmacists or assistant pharmacists employed by or conducting a registered pharmacy. Any person violating the provisions of this section shall be guilty of a misdemeanor, and, upon conviction, shall be sentenced to pay a fine of not less than fifty dollars (\$50.00) nor more than five hundred (\$500.00), or imprisonment for not more than one year, or either or both, in the discretion of the court.

South Carolina.—Sections 5168 to 5191 shall not be construed to prevent merchants or shopkeepers from vending or exposing for sale in original packages medicines already prepared for use.

Sections 5168 to 5191 shall not prohibit country merchants from handling lye, canned goods and drugs as they now handle.

South Dakota.—Provided, that nothing in this act shall be construed to prevent the sale of any patent or proprietary medicines in the original packages by persons other than pharmacists.

Tennessee.—Provided, that nothing in this section shall apply to or in any manner interfere with the selling by any store of copperas, camphor, borax, blue stone, saltpetre, brimstone, licorice, sage, quinine, juniper berries, senna leaves, castor oil, spirits of turpentine, sweet oil, glycerine, Glauber's salts, Epsom salts, cream of tartar, bicarbonate of sodium, and of such domestic remedies as essence of peppermint, essence of cinnamon, hive syrup,

syrup of ipecac, tincture of arnica, syrup of tolu, syrup of squills, spirits of camphor, number six, sweet spirits of niter, compound cathartic pills and other similar preparations, and carbolic acid and tincture of iodine (as below), when compounded by a regular pharmacist and put up in boxes and bottles bearing the label of such pharmacist or wholesale druggist, with the name of the article and the directions for its use on each box or bottle. Nothing in this chapter shall be construed to prevent the sale of patent medicine or proprietary medicine or preparations by any merchant, druggist or dealer.

Texas.—It shall be unlawful for any person who is not a registered pharmacist under the provisions of this act, or who is not under the direct supervision of one so registered to compound, mix or manufacture, or sell or distribute at retail to the consumer any drugs or medicines, except in original packages provided that nothing contained in this Act shall be construed to prevent the sale of patent or proprietary medicines in original packages only and insecticides and fungicides, and harmless chemicals used in the arts, when properly labeled; nor to prevent licensed physicians, dentists, veterinarians and chiropractors from compounding, manufacturing and selling any medicines of their own formula.

Utah.—(See Alabama.)

Vermont.—This chapter shall not apply to the manufacture or sale of patent or proprietary medicines, or to the sale other than on prescriptions of drugs, medicines and poisons.

Virginia.—In rural districts and in towns having a population of one thousand or less merchants and retail dealers may sell the ordinary non-poisonous domestic remedies in original packages put up by manufacturers and wholesale dealers, proprietary medicines, copperas, cream of tartar, calomel, Paris green, bluestone, carbolic acid, London purple, sweet spirits nitre, paregoric, tincture of iron and quinine, in original packages which conform to the requirements of this chapter, and such other medicines as the Board of Pharmacy may permit.

Washington.—Provided, that nothing in this act shall prevent shopkeepers, itinerant vendors, peddlers or salesmen from dealing in and selling the commonly used medicines, or patent and proprietary medicines, if such medicines are sold in the original packages of the manufacturer, or in packages put up by a registered pharmacist in the manner provided by the State Board of Pharmacy.

West Virginia.—The provisions of Section fourteen shall have no application to the sale of patent or proprietary medicines nor to such ordinary drugs in original retail packages, extracts or dyestuffs as are usually sold in a country or city store.

Wisconsin.—This shall not interfere with the sale of proprietary medicines in sealed packages, labeled to comply with the federal pure food and drug law, with directions for using, and the name and location of the manufacturer, nor with the sale of alum, ammonia, borax, bay rum, bicarbonate of soda, cream of tartar, concentrated lye, olive oil, sal ammoniac, sal soda, sulfur, copperas, epsom salts, glauber salts, castor oil, glycerine, senna leaves, indigo, blue vitriol, turpentine, wood alcohol and denatured alcohol.

Wyoming.—Provided, that nothing in this chapter shall apply to, or in any way interfere with the making and vending of patent or proprietary medicines.

A study of the foregoing exemption provisions will show that they are extremely broad, ambiguous in their language, and very difficult of interpretation. Such terms as "grocers' drugs," "such drugs as have heretofore been handled by general merchants," "commonly used household and domestic remedies," and "simple household remedies," are not defined and thus it is virtually impossible to state what is the exact scope and limitations of these terms.

The situation is so confused and confounded that the Committee feels that to bring some sense of order to this phase of pharmaceutical legislation, the exemption provisions must be entirely revamped and reconstructed and that the controlling principle should be public health and that there should be no wide deference to special commercial interests.

It is apparent from a study of the exemption provisions that certain trade groups have been successful in leaving their imprint upon pharmaceutical legislation. While the Committee has no quarrel with the commercial ambitions of any group, the Committee is unreservedly opposed to permitting commercial groups to fashion the pattern of pharmaceutical legislation.

MORE ADEQUATE CONTROL OF DISPENSING BY PHYSICIANS, ETC.

The Committee also feels that the time has come to give real study and attention to the exemptions in pharmacy acts in favor of physicians, dentists and veterinarians. Of all the professional groups seeking to engage in any phase of pharmacy, it is highly probable that the dispensing doctor, the dispensing dentist and the dispensing veterinarian are the least qualified for this work.

If it has been found in the public interest to require pharmacies to operate under annual permits and to require pharmacists to satisfy the state as to their competency when pharmacists are admittedly the best qualified persons to deal in drugs and medicines, then on what theory do we exempt physicians, dentists and veterinarians whose training is tragically defective so far as pharmacy is concerned? If it has been found desirable in the public interest to require manufacturers of drugs, medicines, cosmetics, et cetera, to operate under annual permits issued by the Board of Pharmacy, and to require all manufacturing operations to be in charge of a registered pharmacist or some other person whose technical and scientific training and experience have been approved by the Board of Pharmacy, then again, on what theory do we permit the promiscuous dispensing of these same commodities on the part of physicians, dentists and veterinarians, without at the same time demanding of them some evidence of their qualifications for this work?

Of course, it may be said that physicians, dentists and veterinarians have had some training in drugs and medicines, but this can be answered with the fact that the pharmacist has had much greater training in drugs and medicines, and yet he is required to operate under permit and to satisfy the state as to his qualifications.

It can be said, too, that physicians, dentists and veterinarians have had training in prescription writing and dispensing but this argument can be answered with the fact that the pharmacist has had an infinitely greater amount of training in prescription writing and dispensing. In other words, it seems to the Committee that there is no justification for permitting physicians, dentists and veterinarians an unlimited right to practice pharmacy in the face of their universally admitted incompetence, and in the face of the strict rules and regulations surrounding the practice of pharmacy on the part of pharmacists themselves.

With these thoughts in mind, the Committee believes that physicians, dentists and veterinarians who desire to compound and dispense their own medicines, should be required to operate under annual permits issued by the Board of Pharmacy and that these permits should not be issued except in those cases where the board is satisfied as to the competency of the applicant. The Committee, therefore, believes that in any modernized pharmacy act, this situation should be faced and legislation so drawn as to bring the dispensing doctor, dispensing dentist and dispensing veterinarian under reasonably satisfactory regulation and control, and that probably the best means of securing this control would be through permits issued by the Board of Pharmacy.

The Committee has not had time to formulate a bill which would bring this about but it is hoped to have such a provision in the tentative draft to be ready some time this fall.

Some states, notably Kansas, have seen the necessity for bringing drugs, medicines and chemicals dispensed by physicians under the provisions of the Pharmacy Act and have provided that samples of such drugs, medicines and chemicals may be obtained from such physicians for analysis to determine their compliance with legal standards. (See Kansas under the exemption provisions above.)

As remarked above, the exemption provisions are extremely difficult and many questions of public policy must be considered in dealing with them. Matters of public convenience require attention, but it is believed that the demands of public health should dominate and control the situation. With this thought in mind, the Committee submits the following drafts which might be considered satisfactory in dealing with this phase of our problem. The Committee has not decided just what its position would be with respect to any of these, but merely submits them for study and consideration.

SUGGESTED EXEMPTION PROVISIONS.

I.

In order that the public health may be adequately protected and that the distribution of drugs and medicines might be properly supervised and controlled, the Board of Pharmacy is hereby authorized to issue permits to general dealers in rural communities, under which said general deal-

ers may handle such emergency drugs and commonly used household or domestic remedies, as the Board of Pharmacy may from time to time prescribe.

A "rural community" is hereby declared to be any place three miles or more distant from the nearest pharmacy or drug store.

II.

Nothing in this act shall be construed to prevent the sale of non-poisonous patent medicines and the sale by general dealers in rural communities of such household drugs and medicines as the board of pharmacy may from time to time prescribe. The Board of Pharmacy is hereby authorized to issue permits to such general dealers as may apply for them.

III.

All dealers in non-poisonous patent medicines and all general dealers handling household drugs and medicines, shall operate under permits issued by the Board of Pharmacy, which permits shall be renewed annually. The Board of Pharmacy is hereby authorized to designate those medicinal compounds and preparations to be known as household drugs and medicines.

IV.

Dealers other than pharmacists may handle non-poisonous patent medicines. General dealers may also handle in the manufacturers' or wholesale distributors' original package, Epsom salt, Rochelle salt, boric acid, powdered alum, powdered sulfur, cream of tartar, glycerine, sweet oil, bicarbonate of soda, senna leaves and such other similar household drugs and medicines as the Board of Pharmacy may from time to time prescribe.

The Committee feels that the subject matter of this report, including the definitions of "pharmacy" and the exemptions in the state pharmacy acts, is sufficiently important to warrant close critical study and for this reason hopes that the report will receive the attention which it deserves and that its various proposals may be the subject of full and complete deliberation.

In order that the work of the Committee might receive the most competent study, it is suggested that the president of the AMERICAN PHARMACEUTICAL ASSOCIATION name the secretary of the Board of Pharmacy of every state to serve as an auxiliary member of the Committee. This will give the Committee the benefit of the criticism and suggestions of the men actively engaged in the administration of pharmacy laws, and who may be confidently looked to for valuable aid and coöperation.

It will be the purpose of the Committee to immediately furnish these auxiliary members with a copy of this report and also a copy of the tentative draft of a modern pharmacy law which the Committee hopes to have ready early this fall. It is believed that the procedure suggested here will be of inestimable value to the Committee and to the important work which it has undertaken."

ADDRESS OF PRESIDENT H. C. BYRD. *¹

At the request of President Gathercoal, Dr. R. L. Swain and Dr. A. G. DuMez jointly presented the guest speaker of the session as a favorite son of the state of Maryland. They emphasized his constructive work for higher education in that state and particularly his interest in pharmaceutical education.

Dr. Byrd delivered the following address:

"Several days ago when I began to search for source material for this paper, it was with considerable amazement that I learned that practically nothing had been written on the subject. The American Council on Education and the U. S. Office of Education informed me that they had nothing helpful.

So, we are delving into an apparently virgin field, and the opinions herein expressed are my own personal opinions, which have been organized out of the experience that has been mine in seeking public support for the improvement of professional education in the University of Mary-

* Address at a joint session of the AMERICAN PHARMACEUTICAL ASSOCIATION, the American Association of Colleges of Pharmacy and the National Association Boards of Pharmacy, Minneapolis meeting, 1938.

¹ President of the University of Maryland.

land. These opinions, for whatever they are worth, are expressed in the hope, primarily, that they may provide the beginning of a foundation on which the pharmacy schools particularly may build in their effort to acquire the larger support necessary for higher standards of operation.

If we define what we mean by the term public support, we should, perhaps, consider that it is a type of support that comes from two sources; one from public taxes, the other from endowments. But to-day we shall speak in large measure of that type that might ordinarily be termed tax support, largely because, so far as the East is concerned, at least, there has hitherto been very little effort to mold public sentiment into a professional school consciousness. And, consequently, public tax support of professional schools, at least some of them, has been largely noticeable by its inadequacy or by its absence.

Endowment support, while undoubtedly a kind of public support, comes most often from a development of personal interest on the part of an individual, and the processes by which a University commands this type of support are entirely different from the processes by which it obtains money from a state or municipality. Of course, the same fundamental values that enlist public interest also help enlist the private and personal interest which provides endowments; but the processes by which the professional schools must sell their wares to private interests are essentially different from those used to create public sentiment and to translate that sentiment into cash income from taxes.

In this day when the costs of education are mounting, when more and more students are seeking opportunities to enter the professions, when demands for research funds are reaching hitherto unheard of proportions, the need of public support for professional education, either from endowments or tax money, has become crucial, and undoubtedly constitutes the outstanding problem of professional schools almost everywhere.

Ample laboratories and class rooms, good equipment for both, capable teachers, and teachers with the vision and aggressiveness to seek and to find new knowledge, are costly but they are the only mediums through which we can achieve higher educational standards and better values. And in the greater values we wish to give in improving public service lies the reason for more adequate public support.

But, how can we get adequate public support? In other words, how can we adequately finance the increasing demands for higher educational standards? The answer to these questions not only is vital to those responsible for the administration of professional schools, but also to the professional associations and State Boards which have very definite responsibilities for these schools.

It is a foregone conclusion that students generally no longer can pay the total costs of their education, and in no case where students are expected to pay the total cost can high standards be maintained. Consequently, if we are to have high standards of professional education, the public must be responsible for the difference between what the student can afford to pay and what the education actually costs.

The problem that confronts you and me, therefore, responsible as we are for the conduct of professional schools, is to find a way to make the public understand that it has this responsibility and lead it to accept this responsibility.

No man wants to pay for something that he does not get, and, in a larger sense, the public, which is nothing more nor less than a collection of individuals, is not going to put up hard cash in the form of taxes for something about which it knows nothing and for a service which it does not realize that it is getting. And not only is this true with tax money, but you may be sure that large gifts are not coming from wealthy contributors unless such contributors have knowledge of a very definite and specialized service that is being rendered to them, or to something in which they are particularly interested; or unless, as philanthropists, they recognize a valuable service that is being rendered to the people as a whole.

In either case, or in any case, before the professional schools can expect adequate public support, they must sell generally the idea that they are rendering such valuable services that they have a place in the community, state, and national life that makes them a necessary part of this life.

It is amazing that there is such lack of understanding, even among the parents of young men and women who are attending professional schools, of what the professional schools are trying to do for their students and for the communities they serve. The greatest handicap under which

the professional schools have labored, and are laboring, is the fact that the public, neither directly nor indirectly, has even a reasonable understanding of their character and purposes.

Beginning with and accepting these premises, does not the solution to our problem seem more clear? Does it not seem that we shall find the solution in the simple process of acquainting the public with what we are doing and why?

Let us consider for a moment what the objectives of the professional schools are. The average parent, and the public as well, looks upon them as places where boys and girls may go to acquire certain qualifications which enable these boys and girls to earn a living. The general thought of parents about the professional schools, and the general conception of them on the part of the public, goes very little further and takes very little more into consideration.

Therefore, it is only natural that in the public mind rises the question, "Why should we be taxed to enable this boy, or that girl, to obtain the qualifications that he or she must have to earn a living in the profession which he or she seeks to enter?" A plausible question, and an unthinking, ready answer would seem to be that the public should not be taxed for such a purpose. But let us examine for just a moment this idea and see whether or not we can justify asking the public to evince in the professional schools a larger interest.

Consider the law schools, as an example. Are their functions such as to command sufficient public interest that the public will agree to support them through taxes? What is there of value in these schools to the public generally that should stimulate large private gifts?

When we consider that the graduates of the law schools are responsible for writing practically all the laws on our statute books, and that they are responsible in no small measure, as members of legislative bodies, for the enactment of these laws; and, then, in every case that comes before the courts that have to do with the enforcement of these laws they must plead either for the defense or for the plaintiff; and, even further, that the graduates of these law schools serve without exception as judges who interpret the laws of the nation, the laws of the state, the laws that concern only local communities, laws which affect the lives of every individual and which influence almost our every act, should not the public be vitally concerned with the kind of education that the men in the law schools receive? Should not the public be concerned with the teachers who provide class room instruction, who are responsible for the development of character among the students, who, as judges and as members of legislative bodies and as law enforcement officers, will be responsible for enactment of laws, and for the interpretation and enforcement of law?

That we shall refrain from the enactment of laws that might affect adversely large groups of people, or that cannot be enforced, and that we have wise interpretation of law, have become vitally important to every citizen. Therefore, is it not essential that the public realize the responsibility it has for the safeguarding of legal education so that the legal training for our youth shall be of a type that will develop men with the knowledge, with the character, and with the cultural background, that should enable them to serve well the best interests of all the people? It would be hopeless to expect a law school depending only on the fees of its students, thus being forced to welcome undesirable students and incapable students, to meet the demand for such a high type of service.

In the field of law enforcement alone, the right kind of education in law school will be productive of such returns to our people as will far overbalance such additional costs as would be necessary to provide the best possible training for our lawyers.

Now let us step a little further and consider the field of dentistry. Do we look upon the dental schools as a place where a man may go to acquire sufficient mechanical technique to fill or extract teeth as a professional medium for personal financial gain; or have we sold the public the idea that the dental school is an instrument of service so essential to the general health that those who leave its portals must be sufficiently well equipped, not only in mechanical skill and in medical knowledge to pursue well their profession, but in full knowledge of their responsibilities to the public in carrying on one of the great professions charged with maintaining high standards of health?

We all know what difficulties may arise from diseased teeth. We all know the dangers to glands in different parts of the body from teeth infections, and when the public generally come to understand that their physical welfare is in no small measure dependent on how well the graduates of the dental schools do their jobs, there will be no hesitancy about giving whatever support may be necessary to place dental education on just as high a plane as medical.

Consider our medical schools and see if they are simply places where a boy or girl learns to be a physician, so that that boy or girl may earn a living in the medical profession. This may seem to be true, but far from it! When we consider that the physical welfare of all our people is dependent upon how thoroughly has been the teaching and clinical experience that the medical practitioner has acquired in his four years in medical college, do our people not have a vital interest in how well the medical colleges perform their duties? Should not our people be perfectly willing to pay whatever is necessary to make certain that the work of every medical school is of such a high character as to insure that the needs of our physical being are satisfactorily met?

When your wife, speaking to each of you as an individual, lies in the "valley of the shadow" in order to give birth to new life, does it matter to you what has been the cost of the education of the attendant physician? I do not have to hear your answer, because the only factor that enters into your consideration at such a time is whether or not that doctor has the medical knowledge and technical skill to do his job with sufficient thoroughness that the mother shall be restored to health and strength and that the child shall come into the world physically and mentally fit to grow into a useful citizen. Under such conditions are you not willing, would any man be unwilling, to pay \$5.00 a year in taxes, or \$10.00 a year in taxes, or meet whatever financial responsibility the cost of medical education might entail upon you as an individual, if that expenditure would make certain the medical knowledge and technical skill upon which the lives of your loved one, and the one yet unborn, depend?

Now, let us consider Pharmacy. Is it true that a boy enters a school of pharmacy to go through a perfunctory kind of training to enable him to read the price tag on a cake of soap, or to sell someone a bottle of castor oil, or to tell a feminine customer about the kind of comb that would appear best in her bobbed hair? Some critics hold that the drug store is thus over-commercialized, and deduce from that, that it is silly to waste public funds in giving thorough training to those who are to enter into this kind of business or profession.

Under some conceptions of the objectives of the schools of Pharmacy, it would indeed be difficult to convince State Legislatures that it is justifiable to appropriate tax monies to pay the costs, over and above what the student can pay, of maintaining high standards in pharmaceutical education.

This conception, however, is not the true picture, and it is our responsibility to paint another picture for the public mind; a picture which will prove to the public that they will get adequate returns for every dollar of tax money that they are called upon to expend; and that such expenditure is good public policy. We want the highest type men to enter the pharmaceutical profession and we want for them the best possible education. Let us make the public understand that Pharmacy to-day is just as worth while as a public health profession as is Dentistry or Medicine, and that in its functions it is vital to our every-day needs, vital to the welfare of all.

In the preparation and compounding of drugs and medicines, in the distribution of poisons and narcotics, in the management of law enforcement agencies that control the quality and purity of drugs, and in the research by which we attempt to develop new drugs and new medical preparations, the materials that the pharmacists handle are so dangerous and the services they render are so important that the need for the highest type of training for the men and women we depend upon to do this service should be made sufficiently apparent that no one could escape its significance.

A variation in a prescription beyond the tolerance allowable, in say, Digitalis, on the part of an ill-equipped pharmacist may mean the difference between death and life to the patient. No medical doctor is worth more to the patient than the values measured in the ability of the pharmacist to compound faithfully and accurately the prescriptions the doctor provides.

The problem of the pharmacy school in obtaining public support, even though it has seemed to be much more difficult, is not different from that of the other professional schools. It is simply a process of selling to the public the potential values of services pharmacy schools render. As soon as the public understands the great need for adequately trained men in this field, the great need for higher standards of education, and for the highest standards of character and culture, and as soon as the public translates that understanding into service values for itself, you need have no worry about adequate public support.

But you who are interested so directly in schools of Pharmacy must realize that, in order to imbue the public mind with the thought that the pharmacy schools are instruments of real ser-

vice, it is necessary for you to convince the public that it is a public duty, in the interest of all, to see that these services are of the highest possible standard. We must put our houses, figuratively speaking, in such order that we shall have an excellent product to sell. As long as we are willing to take into the schools of Pharmacy even a small number of sub-standard students, students who are not fitted by such a background of culture and character as to warrant a belief that they can well be entrusted with the responsibility that goes with the kind of services that pharmacists render, just so long will we delay getting the public recognition that is your just due.

To put it another way, with blunt frankness, it is my opinion that the medical schools have found it easier to get public support; to become the recipients of great private benefactions, simply because, years ago, they cleaned their own house and since then have had better selling points with which to approach the public.

In other words, the general lack of adequate public support of schools of Pharmacy has been due in large measure to the fact that the schools of Pharmacy themselves have not been in such a position that they could offer thoroughly convincing arguments that they are worthy of such support.

I do not know, except for hearsay, what the situation is in most of the pharmacy schools of the nation. But I do know what the problem in our own pharmacy school was two years ago and how we met it. I know that we were supposed to have a good pharmacy school and that our standards measured well up to pharmacy school standards generally. Yet we were taking in sub-standard students and maintaining in school sub-standard students with grades that were entirely too low to warrant a belief that they would be successful in any profession. But we were compelled to do this because we were getting practically no public tax support and we needed the fees from these students to enable us to operate.

We met our problem by going to the State Legislature and saying frankly that we were not maintaining as high standards as we felt we should maintain; that we were accepting and turning out men whose standard of work was not such that we felt they would render to the people of the state the quality of services that should be rendered. We told the Legislature that we were compelled to operate on this basis because the people of the State of Maryland had never recognized their responsibility to this branch of education; had never understood the services it is rendering to the people generally and to the pharmaceutical industry specifically. We told the Legislature exactly what it would cost to enable us to raise our entrance standards and to eliminate the unfit. In other words, we gave to the people of the state the reasons why they should expect a high type of service from our Pharmacy School and from its graduates, and we told them, further, the difference in actual cost to the public over and above what the students were paying, to enable us to achieve, in the public interest, the objectives that we were setting forth.

The Legislature grasped our problem; the people throughout the state began to awaken to the real responsibilities of the men who were serving them in this field, and they met their part of the problem by agreeing, by state appropriation, to pay the difference in cost of the higher type of service, and to-day the University of Maryland Pharmacy School is surpassed by few, if any, other pharmacy schools in the percentage of its income that comes from state taxes. And this is simply and solely because we led the people of Maryland to an understanding of what the Pharmacy School means to them and the necessity for having high-type, well-educated men to render the services for which the school is responsible.

But this is not all. The Schools of Pharmacy must begin to take stock of themselves; must begin more definitely to outline their objectives and to state frankly to the people how they propose to achieve these objectives. I do not know what the future of education in the field of pharmacy may develop. Personally, I am strongly inclined to suspect that it may take two trends; possibly three. I believe that pharmaceutical education of the future will go far beyond the mere training of pharmacists. There will always be a constant demand to supply the needs of the drug stores, and it may be that eventually two years of intensive practical training will be deemed sufficient for this type of objective. But in the objectives that have to do with research; that have to do with controlling the quality and purity and distribution of drugs and medicines; in the operation of agencies for the enforcement of legislation, not only will we give four years of work, but also most certainly will go far beyond that. And soon, I suspect, it will be incumbent on us to teach some of the specialties that have to do with law enforcement.

Even further, I believe that in the field of Pharmacy there are wonderful possibilities for extension, organized somewhat along the lines of the extension services of our Agricultural Colleges. Think what it would mean in the way of increased business to the manufacturing interests and to the health of people generally, if the pharmacy schools could, through adequate extension staffs, give to the people generally knowledge of the dangers and values in the use of drugs. This might be stepping on the toes of the medical practitioner, perhaps, but, stepping on toes or not, something of the kind is coming just as surely as to-day the casual customer walks into a drug store and asks the clerk to give him some kind of a proprietary medicine that will be good for a cold. It may be that the day is not far distant when the drug store will become the public health center for its neighborhood. Certainly there is no better medium for the distribution of public health information.

Another field in which the pharmacy schools, through an extension force, might render tremendously valuable services to the drug interests would be in constantly trying to educate the drug interests in the thought that the best interests of all concerned lie within the law. We are going to find ourselves compelled to accept greater responsibilities in this direction in order to meet the constantly increasing regulation by Government agencies.

The State Boards are particularly concerned with this question of government regulation and law enforcement; and especially with educational standards, knowing full well that the product of the pharmacy schools is the product with which they have to deal. No wonder the State Boards, with this realization, have taken a leading part in the effort to get the Pharmacy Schools to raise their standards. But with all due respect to the State Boards, the Schools, as the fundamental basis of the whole pharmaceutical profession and business, should not have to be shown the way by the State Boards, but rather should themselves take the leadership and then zealously guard that leadership. A proper selection of entering students and the right kind of teaching will do more to settle the problems of law enforcement than all the regulations the states and the United States Government could pass in a hundred years.

And those of you who are especially interested in the manufacturing side of Pharmacy should look to, and demand from, the schools a high type of work in the field of research, because on the advancement of knowledge through research depends the success of your industry.

The Pharmacy School, to reach its highest state of development, to achieve the objectives under which it will render the highest type of service, must adopt for itself, as a public health instrument, the same type of yardstick in the measurement of those who enter these schools and later enter the pharmaceutical profession, that the medical schools have adopted. They must understand that Pharmacy is a type of education that cannot be fitted to the individual. It is not an arts and science college in which something can always be found that the student should be able to do, but rather it is a college which selects its students to fit the education it offers; which selects students who, by reason of educational preparation, by character, and by cultural background, seem to be fitted to go into what in the future is going to be one of the most exacting of the public health professions.

'An ideal standard,' you say. 'Undoubtedly,' I reply, 'but a standard that once reached will guarantee the necessary public support.'

The Pharmacy Schools cannot and should not expect adequate public tax support if they continue to warrant the printing about them of statements such as one I recently read in the April issue of a journal published by the American Council on Education, in which it is stated that 'although the American Association of Colleges of Pharmacy has maintained standards of accrediting for about ten years, these standards have not been rigidly enforced and no school has lost its accreditation for failure to meet them.' I doubt if this statement is entirely true, but I quote it to bring to your attention the need for higher standards. No educational agency would dream of printing such a general statement about the Medical Schools.

Gentlemen, the Schools of Pharmacy must believe in themselves, and keep faith with themselves and with the public, if they expect to get the kind of public support that that branch of professional health education deserves and for which I believe the public is willing to pay.

Let us, with a new spirit, determine to serve adequately and well future generations. Let us lead future generations to understand the necessary values in this service. Let us establish our objectives and decide on a way of reaching those objectives, so that our achievements of the future years will enable us to voice, with conscientious satisfaction, that vision from

Revelations, 'I saw a new heaven and a new earth, for the first heaven and the first earth were passed away.'"

The address was received with great interest and upon its conclusion the audience arose and applauded, after which Chairman Gathercoal commented as follows:

"President Byrd, it is difficult to express to you the thanks of this audience. Certainly the inspiration your address contains, the advice it offers, the prophecies for the future that it presents are of inestimable value, not only to the faculties of the Colleges of Pharmacy and the members of the Boards of Pharmacy, but to the entire membership of the AMERICAN PHARMACEUTICAL ASSOCIATION. We would, however, endeavor to express in these inadequate words our deep appreciation of your coming to us this morning, and of the presentation of this very splendid address.

Ladies and gentlemen, I would call your attention to the fact that there is developing during the last few years, in the general program of this great assemblage of pharmacists, known as the AMERICAN PHARMACEUTICAL ASSOCIATION, a new tendency to include addresses of the highest type from persons ranking at the very top in their chosen professions. This is the first address this week of several famous persons who have made a very high mark, not necessarily in Pharmacy, who come to us with this type of inspirational address."

The Joint Session was adjourned at 11:40 o'clock.
