

consistent with honor and dignity to get removed from the statute books of the states and from the regulations of federal bureaus those enactments and decisions which hopelessly hinder and fail to better the conduct of the drug business, the industry has one procedure left. At first blush it appears identical with what has been almost universally customary, but reflection will disclose a difference. Instead of continuing to ask law-makers to cancel unnecessary and burdensome legislation, which in the light of past events would be futile, suppose the drug business resolved itself to regulate, restrict and control those few of its own members who give excuse for the passage of hindering and hampering laws, what would be the result? The first fruits, of course, would be the stoppage of impending legislation which now looms large as a threatening development; the second result would be a public sympathy, respect and support that would eventually force a cancellation of what had been proved to be totally unnecessary restrictions thrown around a law-loving, law-abiding industry. Hence

Rule 12. The drug business should so conduct itself and regulate its members that a deserved and inspired public confidence would render impossible unnecessary and hampering regulations and restrictions.

Every one of the above twelve rules or principles of business conduct have their source in motives of enlightened self-interest. Still they are permeated with ideals reduced to practical terms. The drug business is in a state of flux, out of which will issue something unexistent yesterday and unborn to-day. It is in our hands to determine whether this something shall carry the calling to a plane of greater honor or sink it to a low level of inferiority. This much is certain: the fortunes of retail pharmacy are our fortunes, and as they ebb or rise so will our material fate be fashioned. Destiny will not decree for us a pleasant path nor will it fill our trail with thorns; the road we follow will be constructed by ourselves. Shall our highway be built of shifting sands good only for fair weather travel, or shall we put into its construction a practical idealism, sound judgment, and foresighted management in a manner so blended and cemented as to make for safe travel and permanent progress?

REPORT OF THE SECRETARY SECTION ON EDUCATION AND LEGISLATION.*

BY G. A. BERGY.

Following the plan of Prof. Edward Spease—who suggested the continued use of questionnaires by which information on both educational and legislative matters could be assembled, studied, and progress noted—the Secretary directed questionnaires to the secretaries of the various state boards of pharmacy of the United States while a questionnaire of a different nature was forwarded to each of the deans of the colleges and schools of pharmacy holding membership in the American Conference of Pharmaceutical Faculties.

* Reference to the report of the Secretary, G. A. Bergy, was made in the minutes of the Section—December JOURNAL A. PH. A., p. 1131. Printing was delayed as the Editor thought there was a possibility of joint printing with the Proceedings A. C. P. F.

The legislative work with which this section is greatly concerned, is that pertaining to the educational standards upon which pharmacy rests, and with the coöperative work required to maintain and elevate those standards.

This section is interested in all phases of educational work pertaining to improved teaching methods, model examination questions, improved methods of examinations to be followed by the faculties and state boards of pharmacy, higher standards in the teaching of pharmacy, uniform curricula, uniform entrance requirements for the Conference colleges, problems of research, uniform degrees and bulletins, opportunities in pharmacy, publicity, rewards, scholarship, etc.

THE QUESTIONNAIRE ADDRESSED TO THE DEANS AND FACULTIES OF THE CONFERENCE SCHOOLS.

- A—Correct name and address of school.
- B—Number of students admitted to first year class (freshmen).
- C—Number of students admitted to the second year class (sophomores).
- D—Number of students admitted to the third year class (juniors).
- E—Number of students admitted to the fourth year class (seniors).
- F—Number of students admitted to the graduate school candidates for the Master's or Doctorate degree. M.S..... Ph.D.....
- G—Number of other students admitted.
- H—Total number of students admitted.
- I—Number of students rejected for poor scholarship or misconduct. 1st year.....
2nd year.....3rd year.....4th year.....
- J—Number of high school graduates in first year class.....2nd year.....3rd year...
4th year.....
- K—Number admitted on high school certificates only.
- L—Number admitted on state certificates only.
- M—Number admitted on both high school and state certificates.
- N—Number admitted by examination.
- O—By whom examined.
- P—Educational requirements for admission to course.
- Q—Number graduated in 1923 with degree of Ph.G.
- R—Number graduated in 1923 with degree of Ph.C.
- S—Number graduated in 1923 with the degree of B.S.
- T—Number graduated this year with other degrees, specifying the degrees.

THE QUESTIONNAIRE ADDRESSED TO THE STATE BOARDS OF PHARMACY.

- A—Name of state.
- B—Number examined for pharmacist for year including June to June if possible.
- C—Number examined for assistant pharmacist for the year.
- D—Total number examined for year.
- E—Of the above pharmacists passed.
- F—Of the above assistant pharmacists passed.
- G—Total number passed for the year.
- H—Number from within state registered without examination. (State if on diploma or how, omitting reciprocal registration.)
- I—Number registered by reciprocity.
- J—Is N. A. B. P. plan followed?
- K—New laws affecting pharmacy since last report. (1922.)
- L—Board's ruling raising educational requirements in addition to or in place of above laws.
- M—Unsuccessful attempts to raise educational requirements.
- N—Unsuccessful attempts because of lack of support of: 1. Schools. 2. Druggists.
3. Legislature. 4. Pharmacy boards.
- O—Does your board favor a plan for the discontinuance of licensing assistant pharmacists?

NUMBERS REFER TO SAME SCHOOLS AS IN FOREGOING PART OF TABLE.

No.	J(1).	J(2).	J(3).	J(4).	K.	L.	M.	N.	O.	P.	Q.	R.	S.	T.
1	30	30	5	0	65	0	0	0	0	4 yr.	16	0	0	0
2	39	23	0	0	62	0	0	0	0	4 yr.	23	0	0	0
3	47	54	0	0	0	503 ¹	0	0	0	2 yr. ²	209	0	0	0
4	69	49	0	0	0	0	241	0	0	2 yr.	63	3	0	0
5	120	86	12	0	5	0	0	0	0	2 yr.	80	11	0	0
6	59	43	4	2	108	0	0	0	0	4 yr.	39	4	1	0
7	243	152	0	0	0	478 ³	0	0	0	3 yr.	163	0	0	0
8	10	8	3	0	21	0	0	0	0	4 yr.	0	0	0	0
9	209	127	0	0	336	0	336 ⁴	0	0 ⁶	4 yr.	89	0	0	0
10	62	32	0	2	62 ⁵	0	0	0	0	4 yr.	22	1	1	Ph.D. 17
11	40	9	3	1	0	0	0	0	0	4 yr.	9	3	1	0 ⁸
12	45	48	0	0	206	0	0	19	Fac.	2 yr.	80	0	0	0
13	81	40	1	0	135	0	0	5	Reg. ⁵	4 yr.	39	1	1	0
14	171	100	71	0	171	0	0	11	Fac.	4 yr.	82	1	0	3 ¹⁰
15	34	23	29	0	86	0	0	0	0	4 yr.	0	29	0	0
16	62 ¹¹	0	0	0	0	0	0	0	St. ¹² Bd.	4 yr.	34	0	0	0
17	29	14	31	10	86	0	0	0	0	4 yr.	Ab.	17	7	0
18	72	33	35	2	143	0	0	0	0	4 yr.	Ab.	27	2	1
19	46	36	0	0	82	0	0	0	0	4 yr.	25	0	0	0
20	24	20	5	1	50	0	0	0	0	4 yr.	10	5	1	0
21	52	37	3	0	52	0	0	0	0	4 yr.	25	1	0	0
22	25	25	0	0	56	0	6	0	0	4 yr.	Ab.	0	0	0
23	8	5	2	1	11	0	11	0	0	4 yr.	2	4	0	0
24	51	56	39	15	161	0	0	0	0	4 yr.	11	13	0	0
25	116	127	0	0	0	243	0	0	0 ¹³	4 yr.	111	4	0	18 + 1 ¹⁴
26	15	24	0	0	39	0	0	0	0	4 yr.	27	0	0	0
27	15	24	3	4	169	0	0	0	0	3 yr.	79	4	4	0
28	92	70	3	0	93	0	0	0 ¹⁵	0	4 yr.	23	7	0	0
29	62	24	7	0	73	0	0	0	0	4 yr.	28	2	5	0
30	73	0	0	0	0	0	0	0	0	4 yr. ¹⁶	11	12	9	3
31	66	44	14	15	139	0	2	0	0 ¹⁸	4 yr. ¹⁴	29	2	3	0
32	63	50	4	5	0	0	122	4 ¹⁷	0	4 yr.	8	0	0	0
33	28	14	1	0	43	0	43	0	0	4 yr.	0	0	0	0
34	42	32	9	10	93	0	0	0	0	3 yr.	15	0	8	2
35	26	27	0	0	53	0	0	0	0	4 yr.	30	0	0	0
36	137	129	5	9	280 ¹⁸	278	278	0	0	4 yr.	60	0	8	1 ¹⁸
37	79	53	49	5	190	0	0	0	0	4 yr.	Ab.	38	6	0

CHARTED RESPONSES FROM BOARDS OF PHARMACY.

No.	B.	C.	D.	E.	F.	G.	H.	I.	J.
1	92	16	108	56	29	85	0	22	Yes
2	31	31	25	14	10	24	6	8	Yes
3	324	0	324	106	0	106	6	15	Yes
4	89	7	96	24	8	32	10	46	Yes
5	189	201	390	81	78	159	0	9	Yes
6	126	0	126	32	0	32	0	21	Yes
7	16	11	27	11	8	19	0	2	Yes
8	52	0	52	12	0	12	1	63	Yes
9	484	0	0	160	0	160	0	12	Yes
10	15	0	15	14	0	14	0	9	Yes
11	212	76	288	78	69	147	0	12	Yes
12	548	276	824	173	153	326	0	66	Yes
13	220	0	220	98	0	98	0	15	Yes
14	370	22	370	74	7	81	0	20	Yes
15	115	30	145	52	12	64	0	17	Yes
16	160	19	179	54	55	109	0	51	Yes
17	57	2	59	19	2	21	0	3	Yes
18	66	64	130	42	63	105	0	25	Yes
19	292	191	483	114	61	175	1	21	Yes
20	225	140	365	86	58	144	0	24	Yes
21	156	277	433	135	203	338	50	65	Yes
22	147	0	147	87	0	87	0	13	Yes
23	22	5	27	15	5	20	0	8	Yes
24	54	4	58	20	3	23	0	8	Yes
25	881	255	1136	522	156	678	0	0	Yes
26	17	20	37	14	3	17	0	26	Yes
27	282	231	513	80	107	187	0	0	No
28	179	126	305	138	109	247	0	33	Yes
29	130	15	145	97	8	105	0	20	Yes
30	500	1135	1635	344	658	1002	2	12	Yes
31	0	200	200	0	90	90	0	0	No
32	53	1	54	24	1	25	0	8	Yes
33	60	0	60	18	30	48	1	6	Yes
34	36	13	49	17	4	21	6	5	Yes
35	32	0	32	14	6	20	0	1	Yes
36	111	33	144	48	10	58	0	13	Yes
37	140	150	290	67	92	159	0	13	Yes
38	50	0	50	37	0	37	0	0	**
39	89	8	97	49	8	57	0	20	Yes

* As nearly as possible.

** In 1924.

Notes applying to preceding tabulations:—1. All students must have state certificates for entrance. 2. Thirty regent counts beginning January 1, 1923, 54 regent counts required for entrance. 3. All applicants must have state certificates. 4. State qualifying certificate required by law, but the state accepts the registrar's official permit which is based on accredited high school certificate of graduation with 15 units including required subjects. 5. University of Illinois examiner when examinations are taken. 6. Sixty-two admitted on high school diploma. The exception to this rule is the case of Federal Board students; no degree is given until all requirements for entrance have been met. 7. One Ph.D. granted from Graduate School. 8. We had several who finished the work for Ph.G. degree but were not given the degree because their high school work had not been completed. 9. Registrar of the University of Maryland. 10. Three certificates in business administration. (No degree.) 11. All had 15 units except two with one condition. 12. All students admitted on O. K. from State Board of Education. About one third of class (freshmen) had college work in addition to high school preparation. 13. The Department of Public Instruction examines when necessary. 14. Eighteen certificates of proficiency in Chemistry, Materia Medica, and Pharmacy. One Hospital Technologist. 15. Three taking some subjects as electives, eleven admitted to freshmen class had special standing. 16. Two non-matriculate. 17. Four admitted on examination to raise grades. 18. Adelbert college, Western Reserve University entrance examiner. 19. High School graduation with the grade of 80 in 9.5 prescribed units. 20. Adult specials, not candidates for degrees. 21. One Federal Board Vocational. 22. One hundred-forty undergraduate, 6 graduate students. 23. Four year accredited high school, two thirds of work in four year high school must be of 80% grade or better. 24. The Ph.G. degree discontinued July 1, 1923. 25. Both high school and state certificate required. 26. One B.S. in Agriculture granted.

SUMMARY.

Thirty-six of the forty-five Conference schools to which questionnaires were addressed, 80% replied, in contrast to 77.7% for the year 1922, and 86.6% for the year 1921.

The total number of students admitted to the first year class was 2943, and of these 2346 were high school graduates or 79.4%, in contrast with 34% for the year 1922.

Total number of students admitted to the second year class 2113, of which 1591 or 75.2% were high school graduates.

Total number of students admitted to the third year class 338, of which 286 or 84.6% were high school graduates.

Total number of students admitted to fourth year class was 91; of these 77 or 84.6% were high school graduates.

The total number of students admitted on high school certificates is 1502 whereas 1039 were admitted on high school and state certificates, and 39 were admitted on examination. Virginia reports about 33.3% of the first year class have one or more years of college work. The University of Washington reports 6 graduate students.

Total number of students graduating with the Ph.G. degree was 1462 in contrast with 1283 for the year 1922, and 1480 for 1921.

Total number of students graduating with the degree of Ph.C. was 151 in contrast with 107 for the year 1922, and 64 for the year 1921. The educational advance is splendidly illustrated here, since the number of Ph.C. degrees granted in 1923 shows an increase of 41% over the preceding year 1922, and an increase of 131% over the year 1921.

The total number of students graduating with the degree of B.S. in Pharmacy was 61 in contrast with 65 for the year 1922 and 45 for the year 1921. These figures are of lesser importance or contrast for the number of schools offering four year courses have not materially increased and it is expected these returns will remain more or less stable for the next few years.

Four students completed their work for the Master's degree and one finished with the degree of Doctor of Philosophy.

Twenty-seven irregular certificates were granted including three with certificates in Business Administration, 18 with Certificates of Proficiency in Chemistry, Materia Medica, and Pharmacy, and one as Hospital Technologist. The total number of students enrolled in the 36 conference schools reporting is 5485 and of these 4300 or 78.3% are high school graduates.

A SUMMARIZED REPORT OF THE WORK OF THE COMMITTEE FOR THE FISCAL YEARS 1921-1922-1923.

Of the 48 state boards to which questionnaires were directed, 39 or 81.2% replied in 1923 in contrast with 38 or 79.1% for the year 1922, and 30 or 62.5% for the year 1921.

The boards examined as *pharmacists* 6622 applicants of which 3529 or 53.3% were licensed in 1923, as compared with 6165 of which 2780 or 45% succeeded in 1922, and 4968 of which 2496 or 50% passed in 1921.

The same boards examined as *assistant pharmacists* 3539 candidates of which 2095 or 56.3% passed in 1923, in contrast with 2337 of which 1589 or 68% were successful in 1922, and 1858 of which 1,178 or 63.3% were successful in 1921.

There were 712 pharmacists registered by reciprocity for the fiscal year ending June 30, 1923, 685 for the same period in 1922, and 703 for the year 1921.

Responses to K, L, M, N and O are omitted from the chart and are included in full under the respective states. New laws affecting pharmacy were adopted as follows: Alabama reports that a bill is now before the legislature requiring that after 1924 an applicant must present a diploma from a recognized college of pharmacy before being considered eligible for examination. The board requires the completion of two years of high school or its equivalent. There were no unsuccessful attempts to raise the educational requirements and a plan for the discontinuance of licensing assistant pharmacists has not been considered.

Arizona will attempt to raise standards at the next session of the legislature.

Arkansas reports the passage of a law whereby the sale of medicines containing exempted narcotics is restricted to pharmacists. The qualifications for education and experience are being gradually raised to the standard adopted by the N. A. B. P. The board is vested with power, which must be administered with fine discrimination. Attempts to raise the educational requirements were defeated by the Proprietary Association, grocers and wagon men. The board is undecided upon a plan for the discontinuance of licensing *assistant pharmacists*.

A prerequisite bill was introduced in the Colorado legislature, but failed of passage, due no doubt, in part at least to indifference on the part of the rank and file of the druggists, but chiefly to legislative inertia. The former practice was to require an average of 75% and a minimum of 60% for the *registered pharmacist* certificate, and an average of 65% and a minimum of 50% for the *assistant* grade. In reference to item "H" there is no provision in the Colorado law for granting full registration except by examination or by reciprocity to those who have been registered elsewhere by examination, but registration may be granted as an *assistant*, to any graduate in pharmacy or to any registrant of another state, regardless of the manner in which his registration elsewhere was obtained.

In Connecticut, eleven of the senior candidates who failed in the senior examination but who attained a sufficient grade were granted *assistant* certificates. Subsequent to January 1, 1923, graduation from high school will be the requirement for registered pharmacists, whereas after January 1, 1925, a college requirement will be demanded.

The District of Columbia reports that a bill was presented to the Congressional Committee but it was not reported out of the committee.

In Georgia, the Legislative Committee is still at work on a new pharmacy law patterned after the N. A. B. P. model. There have been two unsuccessful attempts to raise the educational requirements because of lack of support in the legislature. There is a plan on foot for the discontinuance of licensing *assistant pharmacists*.

The recent session of the legislature enacted a law for the repeal of the tobacco license law, which necessitated the payment of a fifty-dollar fee and furnishing a bond, either personal or surety. The prerequisite bill was defeated in the legislature through indifference of its members.

Indiana has amended its law permitting only graduates from approved high schools or equivalent, and graduation from a school of pharmacy in good standing to take the examination to become a *registered pharmacist* after July 1, 1923. A school of pharmacy in good standing is defined as a school which meets and complies with the requirements as prescribed by the Indiana Board of Pharmacy. The requirements as promulgated by the board shall include the provisions outlined by the National Syllabus for courses of instruction, equipment and professional staff. The fees for examination and re-registration have been increased, with penalties attached for delay of the latter. In the case of a failure of a *pharmacist* or an *assistant* registered pharmacist

to pay his renewal fee after the first of October of any year, such registration may be restored upon the payment of all fees unpaid and a penalty of twenty-five dollars per annum for each year or fraction thereof for which payment was in default, provided payment is made within five years from the date of the re-registration period. A pharmacist taking into his employ any person as an apprentice shall require such apprentice, within ninety days after accepting such employment, to make written application to the board of pharmacy for a license as a *pharmacist apprentice*, and the board upon receipt of such application, require such apprentice to undergo examination for the purpose of ascertaining his educational qualifications. Apprentices who fail or refuse to register as a *pharmacist apprentice* shall receive no credit for experience as an employee in a pharmacy. The fee for such registration is one dollar. The state board of pharmacy shall pay to the Indiana Pharmaceutical Association each year out of the annual renewal fees collected, the sum of one dollar for each registered pharmacist and for each assistant registered pharmacist. The funds so paid to the Indiana Pharmaceutical Association shall be used for the purpose of promoting the science and art of pharmacy and shall be paid on condition that such association shall report annually to the state board of pharmacy on the conditions of pharmacy in the state. Hereafter it will be unlawful for any person, firm or corporation to use, take or exhibit the title "drug store," "pharmacy," or "apothecary," or any combination of such titles, or any title or description of like import, or any term designated to take the place of such title, unless registered as pharmacists. Penalties are attached.

Iowa has enacted a law which demands a one-dollar fee as a penalty for delinquent renewals of certificates. The state association selects three names which are to be presented to the governor for appointment as members of the state pharmacy board, one to be appointed. The state is to be divided into districts, from which members of the board may be selected. By board ruling a two-year high school qualification is demanded for eligibility for examination as a registered pharmacist. The board favors a plan for the discontinuance of licensing assistant pharmacists.

After July 1, 1924, Kentucky will require two years' attendance at an accredited high school, or its equivalent, two years' practical experience of a pharmaceutical nature in a retail drug store under a *registered pharmacist*, and evidence of having successfully completed two collegiate years at a college of pharmacy which is a member of the American Conference of Pharmaceutical Faculties.

The high school requirement for the state of Louisiana has been raised to one year. The 1922 session of the legislature failed to pass a prerequisite law because of lack of support of the druggists and some opposition by members of the legislature.

Maine was unsuccessful in raising the educational requirements because of lack of support in the legislature.

Michigan, by board ruling, will require graduation from an accredited four-year high school; no college requirement has been fixed.

In Missouri, the registration fees have been increased from three dollars to five dollars for *assistant pharmacist* and from five dollars to ten dollars for *registered pharmacist*. The four-year high school requirement must be observed after January 1, 1924. The college prerequisite law was defeated in the legislature.

Nebraska reports by board rule that a two-year college course coupled with two-year practical training will hereafter be required for a registered pharmacist. The last session of the legislature, 1923, failed to raise the educational requirements because of lack of support of the druggists. *Assistant pharmacists* have never been licensed in this state.

The state of New York reports amending section 234 of the pharmacy law regulating ownership of pharmacies and drug stores. Hereafter every pharmacy shall be owned by a licensed pharmacist and every drug store shall be owned by a licensed druggist; and no co-partnership shall own a pharmacy unless all the partners are *licensed pharmacists*, and no co-partnership shall own a drug store unless all the partners are *licensed druggists*. It shall be unlawful for a pharmacist to have personal supervision of more than one pharmacy or drug store at a time.

Two minor changes were made in the pharmacy laws of North Carolina; one of these refers to the officers of the board of pharmacy and the other to the investigation and prosecution of persons who violate the laws pertaining to the practice of pharmacy. The prerequisite law requiring graduation went into effect January 1, 1922.

The recent session of the New Jersey legislature amended section four of the pharmacy

law whereby certain phrases used therein were clarified by the change. The pharmacy act confers upon the board the right to fix the preliminary educational requirements to be demanded of prospective students at an approved college of pharmacy. The present standard is four years of completed high school work or its equivalent.

Senate Bill No. 22, House Bills Nos. 148 and 356 were enacted by the Ohio legislature at its last session. The preliminary educational credentials are rather clearly defined. A diploma from a legally constituted high school, normal school or academy, issued after at least four years of study, is required. Persons who are not able to supply evidence of having completed such work must submit to an examination as prescribed by the entrance examiner in order to determine their fitness. Hereafter it shall be the duty of registered pharmacists or other employers, who take into their employ an apprentice for the purpose of his becoming a pharmacist, to register said apprentice within ninety days thereafter, with the state board of pharmacy. The date of experience required of applicant for *registered* or *assistant pharmacist* shall be computed from the date of entering said apprenticeship; and if he or she fails to register, then he or she shall receive no credit for experience in a drug store or pharmacy when he or she makes application for an examination. The state board of pharmacy shall charge and collect the following fees for examination of an applicant for a certificate as a *pharmacist*, twenty dollars; *assistant pharmacist*, fifteen dollars; renewal certificates in either case, five dollars; for reciprocal registration, fifty dollars; for renewal of a certificate which has lapsed sixty days, twelve dollars; for a lapse of three or more years, twenty-seven dollars; for a certificate of apprenticeship, one dollar. Laws were enacted regulating the transportation, labeling and sale of completely denatured alcohol. The state narcotic laws were also revised. The state board of pharmacy is favoring a plan for the abolishment of the practice of licensing assistant pharmacists.

Oregon has increased the examination fee from ten dollars to twenty dollars, and the reciprocity fee from ten dollars to twenty dollars.

In Pennsylvania, the board of pharmacy under the new "Administration Code Law" is now a "Departmental Administrative Board" in the "Department of Public Instruction." The Superintendent of the Department is an *ex-officio* member of the board. The terms are changed from five to six years and the per diem of members increased from ten dollars to fifteen dollars. By board rule, four years' high school for college entrance and pharmacist registration, and two years' high school for assistant pharmacist registration are demanded.

Rhode Island conducts no examination for certificates as *registered pharmacists*. Any *registered assistant pharmacist*, who is a graduate of a duly recognized college of pharmacy authorized to confer degrees, and who declares his intention to keep open shop for dispensing drugs and medicines, may apply for registration as a *registered pharmacist*.

Twenty years' experience in the retail drug business in the state of South Carolina entitles one to a license upon payment of a fee of fifty dollars, without examination. The state board of pharmacy only examines graduates from class-A colleges of pharmacy. The continuance of licensing *assistant pharmacists* is apparently looked upon with disfavor.

An insecticide law in South Dakota permits open sale to all when handled in original packages. The exception is made to dealers in foodstuffs. No new board rulings were passed, the four-year high school requirement being in force. No attempt was made to raise the educational requirements due to lack of sympathy of the members of the legislature.

Utah had a bill before the last legislature which went to defeat through lack of support of the members of the legislature. By board rule a four-year high school requirement is demanded.

In Vermont, the renewal fees for all certificates have been increased from two dollars biennially to four dollars. The board is favoring a plan for the discontinuance of licensing *assistant pharmacists*.

While there were no new pharmacy laws enacted by the legislature of Virginia, the board rulings fix standards of schools which will be approved. A four-year high school or equivalent for college entrance. Only such colleges of pharmacy as maintain six-days-a-week teaching to all classes with bona fide dispensing courses are recognized. There is sentiment favorable to the discontinuance of licensing *assistant pharmacists*.

Wyoming has raised the educational requirements, demanding the completion of two years of high school or its equivalent in 1924, three years in 1925, and four years in 1926.

West Virginia University, Department of Pharmacy, will discontinue the two-year course

after July 1, 1924. A minimum of 30 months' actual drug store experience and graduation from an approved school or college holding membership in the American Conference of Pharmaceutical Faculties are the prerequisites for admission to examination for the certificate of registered pharmacist.

A new pharmacy law became effective in the state of Washington, June 7, 1923. The essential features are as follows: All persons making application for registration by reciprocity, graduation or examination must be graduates of a college of pharmacy approved by the state department of licenses. Graduates of two-year courses of approved colleges of pharmacy must have two years of practical experience and pass an examination in pharmacy, materia medica, posology and toxicology, chemistry, identification of drugs and laws relating to the practice of pharmacy in Washington. Graduates of three, four, or five-year courses of colleges of pharmacy supported by the state of Washington may register on graduation without examination or by examination as they elect. Practical experience is not a requirement. Graduates of three-year courses of colleges outside of the state of Washington must have twelve months of practical experience and pass an examination. Graduates of four or five-year courses of colleges outside of the state of Washington must pass an examination, but practical experience is not a requirement. Applicants by reciprocity must pass an examination in the subject of laws relating to the practice of pharmacy in the state of Washington. All persons must be twenty-one years of age or older. Any persons eighteen years of age and under twenty-one on meeting the aforesaid conditions are registered as *assistant pharmacists*.

POPULARIZING THE PHARMACIST.

The American Chemical Society has a campaign under way which will attack "waste, disease, poverty, sorrow and narrowmindedness." A thought will bring to mind the elimination of waste—there comes to mind just at this writing that of cottonseed and crude oil, which not so many years ago represented a greater per cent. of waste than useful product.

The pharmacist should have a part in whatever prevents disease and necessary in the treatment and diagnosis.

Down in Texas the doctors have opened a publicity campaign under the auspices of Texas State Medical Association. The campaign was primarily inaugurated as an educational move to acquaint the people with the reasonableness and necessity of observing the medical laws for their protection.

The Pennsylvania Pharmaceutical Association has taken steps for celebrating the Centennial of the beginning of synthetic chemistry. By the synthesis of urea Wöhler demonstrated that by chemical procedure many natural products could be duplicated and many compounds can be formed which do not exist in vegetable and animal organisms. The importance of this achievement and its influence on modern medicine and pharmacy is well-known to pharmacists. Liebig and Wöhler were intimate friends; a picture of both is shown on page 559 of the June number, 1923, of the JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION.

The July number of the *Southern Pharmaceutical Journal* is largely given over to the memory of Dr. R. R. D. Cline who was head of the De-

partment of Pharmacy in the University of Texas from 1895 to the time of his death May 20, 1924. It is proposed by the druggists of Texas to raise a fund of \$500,000 for the purpose of erecting a pharmacy building at the University in his memory.

The Scientific Monthly for August, contains a most interesting article by Dr. George K. Burgess, Director of U. S. Bureau of Standards, on "The Scientific Work which Our Government Is Carrying On and Its Influence upon the Nation."

The Chemist and Druggist has completed its one hundredth volume. The annual special issue of June 28, 1924, is a most interesting number and beautifully illustrated. Many of the fine illustrations serve as a guide to Bath for the convenience of chemists who attended the British Pharmaceutical Conference last month. The city of Bath, as is well known, has many historical connections, and remains of Roman occupation still exist. The illustrations are too numerous and interesting to describe briefly. Aside from the photogravures referred to there are also many views, both exterior and interior, of pharmacies in various parts of Europe, some dating back a century or more. Other items of historical interest and value relate to the Assyrian pharmacy, the British Exposition, the exhibits of Burroughs, Wellcome & Company and other British establishments.

Congratulations are extended, not only on the conclusion of sixty-five years of valuable service, but also in recognition of the splendid issue which commemorates the event.