

There is another way to measure the student, and consequently the pharmacy student. That is by the grades made in high school and relative standing in the high school class.

In the autumn of 1935 the College of Pharmacy at Ohio State University accepted 48 students who had no previous college training. Transfer and reinstated students were excluded from this study. The high school records of the applicants were examined and classified into thirds on the basis of high school achievements. This classification was made by an impartial committee working under the direction of the University Entrance Board. This same committee appraised the merits of all applicants for all the colleges in the University. It was found in studying the records of the pharmacy students that only 12.5% were in the lower third, 41.66% in the middle third and 45.83% in the upper third. Thus when the pharmacy freshmen of 1935 were studied in relation to all the other students admitted to Ohio State University it was found that the college was getting three times as many upper third students as there were in the lower third group.

Again, a study was made of our freshmen pharmacy students in relation to the total number of graduates from high schools represented. Thus, this study was made on figures pertaining not only to students who gained admission to Ohio State University, but to the entire remainder, whether they went to some other college or whether they discontinued school. Because of incomplete data filed, the basis of this study was limited to 28 students. By the same method of grouping it was found that 10.71% were in the lower third of their high school class, 32.14% in the middle third and 57.14% in the upper third of a total of 3680 students in the graduating classes of the high schools represented. In other words the majority of the freshman class of 1935 came from the upper third of their high school class.

It is unfortunate that the present system of entrance credentials was not used during past decades. This lack of data has prevented a comparison with students of former years with the degree of accuracy obtainable for the period just studied.

The conclusion to be reached from a study of these entrance statistics must be made after giving due consideration to the changes in the curriculum of the College of Pharmacy in the 12-year period. The last year for students to be admitted in the two-year course was 1924, and thereafter the four-year course only was in effect. Therefore, this is probably the earliest that a check could be made to determine the benefit to be derived from the higher academic requirements. These changes, plus more adequate quarters and a constant study of newer and better methods in use throughout the profession, lead the faculty of the College of Pharmacy at Ohio State University to believe that a better class of students is being attracted to the profession of Pharmacy, and that the four-year course has been of marked benefit in this respect.

#### OUR EDUCATIONAL LOSSES.\*

BY C. O. LEE.<sup>1</sup>

In the fall of 1926, Purdue University gave orientation examinations, for the first time, to all the freshmen coming into the University. These tests were eight

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\* Presented before meeting of Boards and Colleges of Pharmacy of District No. 4.

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in number, divided into three main groups as follows: *First*, general ability tests including intelligence examination and the "Purdue Reading Test, Comprehension." The second group included subject matter ability tests under which were given, Chemistry Aptitude tests, Mathematics Aptitude tests, Physics Aptitude tests and English Aptitude tests. The third group included subject matter training tests under which were the English Training Test and Study Outline Test. Since that time the number of tests has been reduced to the following four: Chemistry Test, Purdue English Test, Psychological Test and Mathematics Training Test. It should be stated that the present chemistry test is for those students who have had chemistry and is given for purposes of classifying the freshmen in the chemistry courses. Since all pharmacy students are required to enroll in the beginning chemistry courses, irrespective of their previous knowledge of the subject, they are not required to take the examination. In reality, then, our freshmen are required to take but three entrance examinations.

During these ten years the students of the School of Pharmacy have taken these tests along with the other entering students. We have watched, with considerable interest, the results of these examinations and tests. As instructors of these students, we should not be too greatly influenced by the results of these examinations for two reasons. The first is that it has become a sort of tradition about the campus that high scoring students are expected to do more and better work than those of low scores. Those who take the suggestion seriously might make an unjust score for themselves and be wrongly classified and in turn misjudged. The second is that the instructor, in looking over the records, might easily be influenced either against or in favor of the student. We have tried not to allow the results of these examinations to influence our judgment or feeling with respect to the student until we have had him in class for a considerable number of weeks. After we have become acquainted with the student and then find that he is doing rather badly in his work, we may refer to the examination records to see whether the student has ability, according to these tests, to carry on the work that has been assigned to him. I sometimes resort to them to help clear up my questionings with respect to certain students. If I find that their work has been unsatisfactory and that their test records show that they were low ranking students, I feel more confident in passing judgment as to whether they should be allowed to continue the course or be advised to drop it. This again is a bit dangerous because we have had a number of students with comparatively low orientation records, yet possessed with certain qualities of determination and willingness to work, who have made very desirable records. On the other hand, we have had students enter with splendid orientation records who, because they lacked these qualities, have been failures, or at least have not been very successful students.

In looking over our records of entering students for the past ten years and checking the number who have entered against those who have graduated, we find a very decided loss in the number who have been able to carry through the four years required at the University. This naturally causes us to ask ourselves, what has happened to these students who have fallen by the wayside? Perhaps we should not be too greatly concerned about our losses, yet it would seem that it is a problem worthy of some consideration. It is rare that we graduate as seniors more than 50% of the entering freshman class. We know considerable about those men

who have stayed with us through the four years and have become rather well acquainted with them during their college careers. Those, however, who remained with us one, two, three and sometimes as long as four semesters, and then dropped out of the University, were soon lost from our knowledge. This report is an account of those students who came to us as freshmen, and a record of what happened to them in the University. It is interesting to note that some stayed for a few weeks, some a few months, some as long as two years and then dropped out of sight and we have not heard from them since. Should we be concerned about them? It seems that we should, because without doubt a number of students who have dropped out for financial causes, or failure in grades, might well have been saved. A number of people who have had their college careers cut short for various reasons might have proved to be very good students and worthy of graduation.

#### STUDENTS AND THE RANKING GROUPS.

From the records the entering students have been classified with respect to the results of the examinations given them into decile groups and I have shown the number of each class that fall into the various deciles from the lowest to the highest. The School of Pharmacy of Purdue University from 1926 to 1936 has had 448 students enrolled. These are all shown in Table I, which follows. It is interesting to note that 73% of our students fall in the lower five decile groups and only about 26% are included in the upper five groups. Again it will be seen that about 41% of our students fall into the three lowest decile groups and only about 10% of them in the three highest decile groups.

TABLE I.—DECILE GROUPS.

Year.	1-10.	11-20.	21-30.	31-40.	41-50.	51-60.	61-70.	71-80.	81-90.	91-100.	Misc.	Total.
1926	4	6	15	8	7	4	9	2	1	0	4	60
1927	2	5	7	12	8	5	3	1	3	2	1	49
1928	8	6	10	9	9	2	3	3	1	1	3	55
1929	5	7	4	6	3	2	3	4	0	0	0	34
1930	3	5	3	6	3	5	5	4	1	0	0	35
1931	4	8	4	4	5	3	2	2	0	1	0	33
1932	1	7	8	5	4	3	1	3	1	0	0	33
1933	1	3	7	3	11	4	2	3	3	0	0	37
1934	5	8	9	2	12	4	3	1	1	0	0	45
1935	13	7	6	11	13	4	6	6	1	0	0	67
Totals	46	62	73	66	75	36	37	29	12	4	8	448

From our experience and observations, we have come to feel that those who fall into the lower first and second deciles have a difficult time in carrying the university load in the School of Pharmacy. Those who fall in the third decile group can usually carry the work by considerable diligence and application. We have found that those who place themselves, by examination, in the fourth, fifth and upper decile groups can carry the work rather easily and oftentimes can do distinctive work, according to the standards set up by the University. While about twenty-six per cent of our students place themselves, according to these examinations, in the upper five decile groups, it is quite disappointing to know that the students who, by these examinations, display superior ability often do just enough to get by and do not distinguish themselves scholastically. This, of course, does not apply

to all of the students, but it is entirely too general as far as we are able to see, and is not confined alone to students in the School of Pharmacy.

Reference was made, early in this discussion, to the fact that we have a number of students who come and stay with us for a short time, drop out of the University and are never heard from again. In our files we find such notes as these: "Put on probation," "probation continued," "dropped by faculty action" and so forth. Beyond this we have not followed them.

It not infrequently happens that some of our students, who fell by the scholastic wayside, have gone out into business and are prosperous. This is all well and good, for perhaps such students were not happy in their college life and are much happier out doing something in the world of business. However, there is a possibility that some have left the University with disappointments and memories of failures that may mar their lives.

The University, however, tries all possible means to correct or alleviate any such stigma that might come upon the lives of these young men and women. This is not an easy thing to do in many cases.

TABLE II.

Decile.	1926.			1927.			1928.			1929.			1930.			1931.		
	T.*	G. <sup>1</sup>	L. <sup>2</sup>	T.	G.	L.	T.	G.	L.	T.	G.	L.	T.	G.	L.	T.	G.	L.
1- 10	4	3	1	2	0	2	8	3	5	5	0	5	3	0	3	4	1	3
11- 20	6	1	5	5	1	4	6	1	5	7	2	5	5	1	4	8	3	5
21- 30	15	6	9	7	0	7	10	3	5	4	3	1	3	1	2	4	0	4
31- 40	8	7	1	12	6	6	9	5	4	6	4	2	6	1	5	4	3	1
41- 50	6	1	5	8	3	5	9	8	1	3	1	2	3	0	3	5	2	3
51- 60	4	2	2	5	4	1	2	1	1	2	1	1	5	4	1	3	2	1
61- 70	9	5	4	3	2	1	3	1	2	3	3	0	5	2	3	2	1	1
71- 80	3	2	1	1	0	1	3	2	1	4	2	2	4	4	0	2	2	0
81- 90	1	1	0	3	1	2	1	1	0	0	0	0	1	1	0	0	0	0
91-100	0	0	0	2	1	1	1	1	0	0	0	0	0	0	0	1	1	0
Totals	56	28	28	48	18	30	52	26	24	34	16	18	35	14	21	33	15	18

\* T = Total.

<sup>1</sup> G = Graduated.

<sup>2</sup> L = Lost.

Table II is a summary of those students who entered the School of Pharmacy during the years 1926 to 1931, inclusive. All of those who entered during these years have either graduated or have left the University for other reasons. A glance at this table will indicate that we have at no time graduated more students than were lost from the school. In fact about 45% of those who entered were graduated. The remaining 55% left the University for various reasons. A majority of those entering before 1930 were enrolled in the three-year course.

It is a story that does not indicate very high educational efficiency, perhaps, but we hardly know just how badly we should feel about it. The thing that is disturbing is the fact that nearly 30% of the lowest ranking students have remained on and graduated while a number of the higher grade students have not graduated.

These facts are shown in Table III following, where the 258 students entering pharmacy from 1926 to 1931, inclusive, are listed by number and by percentages. As one might expect, the greatest losses are from the lower ranking groups.

TABLE III.

	Decile Groups.	Students per Group.	Lost.		Graduated.	
			Number.	Percentages.	Number.	Percentages.
1	1- 10	26	21	70.08	7	29.92
2	11- 20	37	28	75.68	9	24.32
3	21- 30	43	30	69.77	13	30.23
4	31- 40	45	19	42.33	26	57.77
5	41- 50	34	19	55.89	15	44.11
6	51- 60	21	7	33.34	14	66.66
7	61- 70	25	9	44.00	14	56.00
8	71- 80	17	5	29.42	12	70.58
9	81- 90	6	2	33.34	4	66.66
10	91-100	4	1	25.00	3	75.00

We are not drawing conclusions from the study of these tables but the data present very serious educational and professional problems. First of all, there must be some reason or explanation for so many students dropping by the wayside before graduation time. We can explain this on the basis of the student's ability and various other factors that influence the lives of these young people, who come to us from homes over the state and country to enter into the life of the university and the college experience, but such explanations are inadequate. Some of them undoubtedly have backgrounds quite inadequate for such experiences as the college offers them, but this would not apply to all who fell by the wayside.

We are perhaps doing a very bad job of selecting the students who come to us. It would seem that we should know our students before they enter the University. From a knowledge of their experience, training and ability, we should be allowed to decide whether they are fully and thoroughly equipped to carry on the work expected of them in the School of Pharmacy and in other courses of the University.

As teachers of pharmacy we have a threefold obligation; namely, to the student, the state and the profession. We might fulfil these more efficiently and better by spending more time in selecting our students than in trying to salvage them.

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TENTATIVE PROGRAM, THIRTY-SEVENTH ANNUAL MEETING OF THE  
AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY, AUGUST 24-25, 1936.

OFFICERS.

*President*, Robert C. Wilson; *Vice-President*, Homer C. Washburn; *Secretary-Treasurer*, Zada M. Cooper; *Chairman of the Executive Committee*, Charles B. Jordan.

MONDAY, AUGUST 24TH.

9:00 A.M. Meeting of the Executive Committee.

9:30 A.M. Meeting of Teachers' Conference.

CONFERENCE OF TEACHERS OF PHARMACY, AUGUST 24TH, 9:30 A.M.

*Chairman*, Emery T. Motley; *Vice-Chairman*, Robert C. Wilson; *Secretary*, Charles O. Lee.

CONFERENCE OF TEACHERS OF CHEMISTRY, AUGUST 24TH, 9:30 A.M.

*Chairman*, Arthur H. Uhl; *Secretary*, Lewis C. Britt.

CONFERENCE OF TEACHERS OF PHARMACOGNOSY AND PHARMACOLOGY, AUGUST 24, 1936.

*Chairman*, Charles E. F. Mollett; *Secretary*, Ralph D. Bienfang.

## CONFERENCE OF TEACHERS OF PHARMACEUTICAL ECONOMICS, AUGUST 24, 1936.

*Chairman*, John F. McCloskey; *Secretary*, W. Henry Rivard.

## SESSIONS OF THE ASSOCIATION.

## FIRST SESSION, MONDAY, AUGUST 24th, 1:30 P.M.

Roll Call.

Appointment of Committee on Resolutions.

Address of the President, Robert C. Wilson.

Report of Secretary-Treasurer, Zada M. Cooper.

Report of Executive Committee, Charles B. Jordan.

Appointment of Nominating and Auditing Committees.

Reports of Standing Committees:

Committee on Educational and Membership Standards, A. G. DuMez.

Committee on Curriculum and Teaching Methods, L. Wait Rising.

Committee on Activities of Students and Alumni, Edward J. Ireland.

Delegates to the American Council on Education, Rufus A. Lyman.

## Monday, August 24th, Annual Dinner, 6:00 P.M.

## SECOND SESSION, MONDAY, AUGUST 24TH, 8:00 P.M.

Reports of Standing Committees (*Continued*):

Committee on Relation of Boards and Colleges, C. Leonard O'Connell.

Committee on Libraries, Charles O. Lee.

Committee on Problems and Plans, Rufus A. Lyman.

Syllabus Committee, J. G. Beard.

Reports of Special Committees:

Committee on Student Branches of the AMERICAN PHARMACEUTICAL ASSOCIATION, William G. Crockett.

Committee on the Establishment of a Pharmaceutical Corps in the United States Army, Edward Spease.

Committee on Food and Drug Legislation, Charles B. Jordan.

Committee on Pharmacy Aptitude Tests, Carl J. Klemme.

## JOINT SESSION OF THE NATIONAL ASSOCIATION OF BOARDS OF PHARMACY AND THE AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY, TUESDAY, AUGUST 25, 1936, 9:00 A.M.

Report of the Fairchild Scholarship Committee, E. G. Eberle.

## THIRD SESSION, TUESDAY, AUGUST 25TH, 2:00 P.M.

Reports of Special Committees (*Continued*):

Committee on Professional Relations, George C. Schicks.

Committee on the Study of Examinations, C. Leonard O'Connell.

Reports of Special Representatives:

Representative on American Council on Pharmaceutical Education, A. G. DuMez.

Reporter on Biological Abstracts, Heber W. Youngken.

Representatives to National Council on Pharmaceutical Research, Glenn L. Jenkins.

Representatives to Druggists' Research Bureau, Paul C. Olsen.

Representative to the National Association of Retail Druggists, Clair A. Dye.

Report of the Historian, Edward Kremmers.

Unfinished Business; Miscellaneous; Election of Officers; New Business; Executive Session.

## TENTATIVE PROGRAM, NATIONAL ASSOCIATION BOARDS OF PHARMACY.

## FIRST SESSION, MONDAY, AUGUST 24TH, 9:30 A.M.

1. Call to Order, President Mac Childs.
2. Roll Call.
3. Appointment of Committee on Credentials, President Mac Childs.

4. President's Address, Mac Childs.
5. Appointment Committee on President's Address.
6. Report of Secretary, H. C. Christensen.
7. Report of Treasurer, J. W. Gayle.
8. Appointment of Nominating Committee, President Childs.
9. Report of Executive Committee, Clare Allan, *Chairman*.
10. Presentation of Suggested Amendments to Constitution and By-Laws, Walter Varnum.

SECOND SESSION, MONDAY, AUGUST 24TH, 1:30 P.M.

1. Report of Advisory Examination Committee, H. C. Christensen, *Chairman*.
2. Report of Syllabus Committee.
3. Report of Legislation Committee, G. A. Moulton, *Chairman*.
4. Report of Committee on National Legislation, Robert L. Swain, *Chairman*.
5. Report of Committee on Prerequisite Legislation, C. W. King, *Chairman*.
6. Report of Publicity Committee, Hugh P. Beirne, *Chairman*.
7. Report of Grievance Committee, M. N. Ford, *Chairman*.
8. Report of Committee on National Certificate, H. C. Christensen, *Chairman*.
9. Report of Committee on Minimum Standards of Technical Equipment, A. C. Taylor, *Chairman*.
10. Report of Committee on Pharmaceutical Jurisprudence, Roy B. Cook, *Chairman*.
11. Report of Committee on Code Matters, Robert L. Swain, *Chairman*.
12. Report of Banquet Committee, Walter H. Cousins, *Chairman*.

N. A. B. P. Banquet, Monday, August 24th, 6:30 P.M.

JOINT SESSION WITH AMERICAN ASSOCIATION COLLEGES OF PHARMACY, TUESDAY, AUGUST 25TH, 9:00 A.M.

FINAL SESSION, TUESDAY, AUGUST 25TH, 1:30 P.M.

1. Reports of Vice-Presidents.
  - District No. 1, V.-P. George A. Moulton.
  - District No. 2, V.-P. J. M. Woodside.
  - District No. 4, V.-P. Earl Durham.
  - District No. 6, V.-P. Emmett Weaver.
  - District No. 7, V.-P. R. C. Shultz.
2. Report of Committee on President's Address.
3. Report of Department of Education, R. L. Swain, *Director*.
4. Report of Committee on Constitution and By-Laws, Walter Varnum, *Chairman*.
5. Report of Resolutions Committee, A. C. Taylor, *Chairman*.
6. Reports of Special Committees.
7. Unfinished Business.
8. New Business.
9. Report of Nominating Committee.
10. Election and Installation of Officers.
11. Adjournment.

PROGRAM OF NATIONAL CONFERENCE ON PHARMACEUTICAL RESEARCH, 1936  
MEETING, DALLAS, TEXAS, AUGUST 22, HOTEL ADOLPHUS.

FIRST SESSION, 2:00 P.M.

1. Call to Order by Chairman.
2. Appointment of Nominating Committee.
3. Summary of Year's Activities and Outlook of Conference for the Future, by Chairman Gathercoal.
4. Reports of Officers.
  - a. Report of Secretary.

- b. Report of Treasurer.
  - c. Report of Executive Committee by Secretary.
  - 5. Reports of Standing Committees.
    - (1) Physical Chemistry, Arthur Osol, *Chairman*.
    - (2) Bacteriology and Immunology, Louis Gershenfeld, *Chairman*.
    - (3) Pharmacognosy, Heber W. Youngken, *Chairman*.
    - (4) Pharmacology and Bioassays, James C. Munch, *Chairman*.
  - 6. Roll Call of Delegates.
  - 7. Adjournment for Dinner. Arrangements Will Be Made for a Dinner for the Delegates Assembled.
- An address pertinent to the work of the Conference will be delivered.

## EVENING SESSION, 8:00 P.M.

- 8. (5) Medicinal Chemicals, Joseph Rosin, *Chairman*.
  - (6) Endocrinology, Arthur Grollman, *Chairman*.
  - (7) Manufacturing Pharmacy, L. Wait Rising, *Chairman*.
  - (8) Pharmaceutical Dispensing, William J. Husa, *Chairman*.
  - (9) Educational Methods, A. B. Lemon, *Chairman*.
  - (10) Pharmaceutical Economics, Harry S. Noel, *Chairman*.
  - (11) Historical Pharmacy, Charles H. LaWall, *Chairman*.
  - 9. Reports of Other Special Committees.
    - (1) Publications, Edward N. Gathercoal, *Chairman*.
    - (2) Census of Research, James C. Munch, *Chairman*.
  - 10. General Discussion of the Status of Pharmaceutical Research.
  - 11. Election and Installation of Officers.
  - 12. Adjournment.
- Chairman*, E. N. Gathercoal; *Secretary*, John C. Krantz, Jr.

## CORRECTIONS IN THE U. S. P. XI.

Since the appearance of the new Pharmacopœia in December of 1935, the text has been subjected to intensive review and some corrections have been found necessary. In so far as these cover typographical errors or accidental inaccuracies, authority has been given to publish the list of corrections in pharmaceutical and medical journals.

Purchasers of the new Pharmacopœia may also obtain a printed list of these corrections for insertion in their copies of the U. S. P. Send a 3-cent stamp to the publishers of the Pharmacopœia, the Mack Printing Company, Easton, Pa.

Questions have also arisen concerning certain Pharmacopœial assays or tests and these are under investigation. In those cases where it becomes desirable to revise any of the printed monographs such changes will be announced by "Interim Revision" procedure.

## NATURAL WATER VERSUS DISTILLED WATER IN DRUG EXTRACTION, ETC.

The new Pharmacopœia directs that distilled water shall be used in all formulas, but a further study of the difficulties involved has led the Committee to revise this requirement and permit the use of a *natural water* of good quality as an alternative to distilled water in the extraction of U. S. P. vegetable drugs and in the manufacture of Resin of Podophyllum and of Saponated Solution of Cresol. This is of the nature of an "interim revision" and a formal statement permitting the alternative use of natural water and establishing standards for it will be issued in the near future as an Interim Revision.

In addition to this revision of the distilled water requirement, other interim revision changes will soon be announced.

E. FULLERTON COOK, *Chairman*.

*Corrections in N. F. VI will be found at end of Council Letter No. 21, this issue of the JOURNAL.*



## CORRECTIONS IN THE UNITED STATES PHARMACOPŒIA, ELEVENTH REVISION.\*

To be made in copies numbers 100,001 to 150,000.

Page.	Lines.	
lxx		Under "Hydrastis" and the sub-head "Pulvis Hydrastidis" change "Hydrastis" to "Hydrastine".
lxxiv		Change "Theophyllina cum Sodii Acetas" to "Theophyllina cum Sodii Acetate."
19	4-6	Change to: "Mix 0.5 Gm. of powdered Citric Acid with 5 cc. of sulfuric acid in a test-tube that has been previously rinsed with sulfuric acid and maintain the temperature of the mixture at 90° C. for one hour: the color of the mixture is not darker than matching fluid K, described under the test for <i>carbonizable substances</i> , page 441."
32	1-3	Change to: "The potency of Aconite shall be such that 0.1 Gm. of it, when extracted and assayed as directed under <i>Tinctura Aconiti</i> , page 391, shall possess an activity equivalent to not less than 0.150 milligram of reference aconitine."
32		Fifth line from bottom of page: Change 14.3 to 15.8.
78	1-4	Change to: "The solution produced by dissolving 0.2 Gm. of Atropine Sulfate in 5 cc. of sulfuric acid has no more color than matching fluid A, described under the test for <i>carbonizable substances</i> , page 441, and the solution becomes only light yellow upon the addition of 0.2 cc. of nitric acid ( <i>many other alkaloids</i> )."
96	33-46	Change to: "Assay: Weigh accurately in a glass-stoppered weighing tube about 0.4 Gm. of Calcium Bromide, dissolve it in 100 cc. of distilled water and add 1 cc. of hydrochloric acid. Heat the solution to boiling and add, with stirring, an excess of hot ammonium oxalate T.S., then make slightly alkaline with ammonia T.S. Heat the mixture on the water-bath for two hours, filter through hardened filter paper and wash thoroughly with warm distilled water. Puncture the filter paper, wash the precipitate into a beaker by means of a stream of hot distilled water, followed by 30 cc. of dilute sulfuric acid (1 in 3), heat the solution, if necessary, to 60° C. and titrate with tenth-normal potassium permanganate. Each cc. of tenth-normal potassium permanganate is equivalent to 0.009996 Gm. of CaBr <sub>2</sub> ."
97	43	Change 0.05004 Gm. to 0.005004 Gm.
103	18	Change to: "The specific rotation $[\alpha]_D$ of Natural Camphor, determined at 25° C., in a solution containing 10 Gm. of Camphor in sufficient alcohol to make 100 cc. and using a 200-mm. tube, is between +41° and +42°, page 459." Omit all reference to the specific rotation of Synthetic Camphor.
118	12	Change 0.5 Gm. to 0.2 Gm.
125		Third line from bottom of page: Change 0.5 Gm. to 0.01 Gm.
126	10	Change 433.25 to 424.24.
127	32	Change "0.45" to 0.45.
135	21-22	Add between the lines: "NOTE: In preparing aqueous solutions of Dextrose it is permissible to use a dextrose which does not conform to the official requirements for

\* A copy of this list may be obtained by a purchaser of the U. S. P. XI by sending a 3-cent stamp, to cover postage expense, to the publishers of the Pharmacopœia, the Mack Printing Company, Easton, Pa.

water of hydration, provided the product meets all other official tests for purity and also provided suitable allowance is made for the difference in water content."

- 139 17 *Change 0.5 Gm. to 0.1 Gm.*
- 150 12 *Change 0.3 Gm. to 0.03 Gm.*
- 150 12 *Change 5 grains to 1/2 grain.*
- 180 11-14 *Change to:*  
 "Vigorously shake 5 cc. of Glycerin with 5 cc. of sulfuric acid in a glass-stoppered 25-cc. cylinder for one minute and allow the liquid to stand for one hour; it does not become darker than 10 cc. of matching fluid H, described under the test for *carbonizable substances*, page 441."
- 195 Fourth line from bottom of page: *Change 62 to 63.*
- 195 Fifth line from bottom of page: *Change 61 to 60.*
- 196 29-30 *Change "continue the heating" to "maintain the crucibles and mass at dull redness."*
- 208 33 *Add the synonym "Viosterol in Oil."*
- 208 44 *Delete: "Unsaponifiable matter: not more than 2 per cent, page 446."*
- 231 Fourth line from bottom of page, *delete: "natural."*
- 231 Fifth line from bottom of page, *change 42° and 44° C. to 41° and 43° C.*
- 235 Fourth line from bottom of page, *change 0.2 Gm. to 0.12 Gm.*
- 278 21 *Insert before "Add:":*  
 "Place 100 cc. of distilled water in a 300-cc. Erlenmeyer flask, add 5 cc. of Paraldehyde, and shake the mixture gently until solution is complete."
- 289 Sixth line from bottom of page, *change 0.5 Gm. to 0.1 Gm.*
- 290 Twelfth line from bottom of page, *change 0.5 Gm. to 0.1 Gm.*
- 313 6 *Change 0.5 Gm. to 0.2 Gm.*
- 313 Last line at bottom of page, *change 0.5 Gm. to 0.2 Gm.*
- 315 27 *Change 0.5 Gm. to 0.2 Gm.*
- 316 14 *Change 0.5 Gm. to 0.2 Gm.*
- 317 17 *Change 0.5 Gm. to 0.2 Gm.*
- 318 22 *Change 0.5 Gm. to 0.2 Gm.*
- 319 8 *Insert after "444:" "using about 1 Gm. of the Rosin accurately weighed."*
- 321 5 *Delete "or" and insert after "species:" "(except Rheum rhaiponticum) or of."*
- 322 22 *Change 0.5 Gm. to 0.2 Gm.*
- 324 Line 10 from bottom of page, *change 0.5 Gm. to 0.1 Gm.*
- 353 30 *Change 25 cc. to 5 cc.*
- 353 39 *Change 25 cc. to 5 cc.*
- 362 Ninth line from bottom of page, *change 0.5 Gm. to 0.1 Gm.*
- 363 30 *Change 0.5 Gm. to 0.2 Gm.*
- 368 31 *Change 7.243 to 7.281.*
- 377 *Insert between the third and fourth line from bottom of page: "Alcohol content—From 1 to 2 per cent, by volume, of C<sub>2</sub>H<sub>5</sub>OH."*
- 378 27 *Change 7.5 to 8.5 to 8.5 to 11.*
- 383 5 *Change 0.5 Gm. to 0.2 Gm.*
- 384 20 *Change 0.5 Gm. to 0.2 Gm.*
- 384 33 *Change 70 to 75.*
- 384 34 *Change 80 to 85.*
- 391 25-32 *Change the directions to:*  
 "Prepare a tincture by Process P, as modified for assayed tinctures, page 390, using a mixture of 3 volumes of alcohol and 1 volume of distilled water as the menstruum. Macerate the drug during twenty-four hours and then percolate it at a moderate rate. Immediately add sufficient hydrochloric acid to this percolate to produce a  $p_H$  of  $3 \pm 0.2$ , page 576. Assay

a portion of the percolate and adjust the volume of the remaining liquid by dilution with the above menstruum, including sufficient hydrochloric acid to produce a  $p_H$  of 3 = 0.2, page 576, so that the finished Tincture will conform to the above biological standard."

399		<i>Insert between the tenth and eleventh lines from the bottom of page: "Alcohol content—From 58 to 64 per cent, by volume, of C<sub>2</sub>H<sub>5</sub>OH."</i>
488	28	<i>Change 0.1631 Gm. to 0.1814 Gm.</i>
572	25	<i>Change 0.02041 to 0.2041.</i>
592	14	<i>Change 433.25 to 424.24.</i>

#### SUGGESTED MOUTH WASH PRESCRIPTIONS FOR USE IN DENTAL PRACTICE.\*

The Committee desires to exchange publicity material distributed to the medical profession.

℞

Apoth. Metric.

Liq. Antisept. N. F.      ℥̄ viii 240 cc.

Sig: Dilute with equal parts of water as a mouth wash.

NOTE: This same preparation may be prescribed by writing the official Latin title—*Liquor Antisepticus N. F.* or the official English title—*N. F. Antiseptic Solution.*

Another way of writing the same prescription.

℞

Liq. Antisept. N. F.      ℥̄ iv 120 cc.  
Aq. Dest.      qs. ℥̄ viii 240 cc.  
M.

Sig: Use undiluted as a mouth wash.

NOTE: To color the above prescription red add

Liq. Amaranth. N. F.      m x 0.6 cc.

℞

Liq. Arom. Alk.      ℥̄ viii 240 cc.

Sig: Use undiluted as a mouth wash.

NOTE: For use in *dental spray bottle* dilute with 5 volumes of water.

Official Latin title—*Liquor Aromaticus Alkalinus*, Official English title—*Alkaline Aromatic Solution.*

This preparation is red in color.

℞

Apoth. Metric.

Liq. Iodi Phenol.      ℥̄ viii 240 cc.

Sig: Dilute with equal parts of water as a mouth wash.

NOTE: This same preparation may be prescribed by writing the official Latin title—*Liquor Iodi Phenolatus*, or the official English Title—*Phenolated Solution of Iodine*, or the official synonyms—*Boulton's Solution*, *French Mixture* or *Carbolized Solution of Iodine.*

Another way of writing the same prescription.

℞

Liq. Iodi Phenol.  
Aq. Dest.      aa ℥̄ iv 120 cc.  
M.

Sig: Use undiluted with water.

℞

Liq. Sod. Bor. Co.      ℥̄ viii 240 cc.

Sig: Use as a mouth wash.

NOTE: The official Latin title for this preparation is—*Liquor Sodii Boratis Compositus*, Official English title—*Compound Solution of Sodium Borate*, official synonym—*Dobell's Solution.* (*To be continued.*)

\* U. S. P.-N. F. Publicity Committees of the Maryland State Dental Association, Maryland Pharmaceutical Association and Baltimore Retail Druggists' Association.

#### TEXAS WILD FLOWERS.

This profusion of wild flowers on Texas roadsides is not accidental. It results from planned efforts of the State Highway Department in roadside improvement. In all parts of the State, highway maintenance men mow flowers that have gone to seed. They cut not only along the roads but also—with the owners' permission—in farmers' fields in which desirable wild flowers are abundant.