TREASURY DEPARTMENT
UNITED STATES PUBLIC HEALTH SERVICE

HYGIENIC LABORATORY—BULLETIN No. 119
NOVEMBER, 1919

DIGEST OF COMMENTS
ON
THE PHARMACOPŒIA OF THE UNITED STATES OF AMERICA
AND ON THE
NATIONAL FORMULARY

FOR THE CALENDAR YEAR
ENDING DECEMBER 31
1916

By

A. G. DuMEZ

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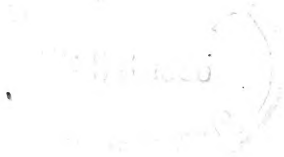

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PREFACE.

This bulletin is the twelfth in the series of Hygienic Laboratory publications, known as the Digest of Comments on the Pharmacopœia of the United States of America and the National Formulary. Like the preceding bulletins of this series, it is a comprehensive index of all available literature which may be of interest or of value in connection with the revision of the two standard works mentioned in the title. The marked reduction in the number of pages from that of preceding numbers is not the result of an attempt on the part of the compiler to narrow the scope of the work, but is due to a diminution in the number of articles pertaining to pharmaceutical research published during the year 1916, and to the fact that a number of the foreign periodicals have not been received in this country of late. In fact, the publication of some of these journals has been suspended for the period of the war.

In this, as in the preceding numbers of the bulletin, all of the available literature has been gone over carefully and the abstracts have been made as concise as possible without detracting from their value as working references. In those cases where the articles were of such a nature that they could not be abstracted with advantage, merely the titles have been given.

No attempt has been made to differentiate between the references of greater or lesser importance. Comprehensive discussions or reports are given comparatively little space, the intent being to call attention to the character and scope of the original paper rather than to make a complete record of its content. Some idea of the importance of an article may, however, be formed from its length, as indicated by the page reference.

In citing references no attempt has been made to record all of the periodicals in which a given paper may have appeared. As a rule, the reference most easily accessible to the American pharmacist has been given preference, even in those cases where the original paper did not appear in the publication recorded. With respect to the papers presented at the annual meetings of the British Pharmaceutical Conference, references are only given to the Pharmaceutical Journal and the Yearbook, it being understood that wherever these two references appear conjointly the article can also be found in the British and Colonial Druggist and the Chemist and Druggist.

As a result of the appearance of the revised editions of the United States Pharmacopœia (U. S. P. IX) and the National Formulary (N. F. IV), which became official on September 1, 1916, the literature of the latter part of the year was of special importance, as it contained many interesting reviews of these standards. General references to articles of this nature are recorded under the subdivision devoted to comments on the nature and content of the Pharmacopœia, whereas the specific comments contained in these articles are recorded under the respective items to which they refer.

In view of the fact that the new editions of the United States Pharmarcopœia and the National Formulary contain chapters on sterilization and that the former also contains chapters on diagnostical reagents and culture media, articles dealing with these subjects have been abstracted in greater number than in previous issues of the bulletin. Even under these conditions, however, the abstracts which have been included refer only to the more important articles on these subjects as a complete review of the literature was impossible in the time allotted to this work.

In addition to comments which have a direct bearing on the two legally recognized drug standards of the United States, an effort has been made to include abstracts of articles which are of indirect interest in this connection. This bulletin, therefore, includes a number of abstracts of articles dealing with the food and drug laws, antinarcotic laws, poison laws, drug inspection work, sera and vaccines, drug plant cultivation, foreign pharmacopœias, works on standards, etc. In view of the limited amount of time at the disposal of the compiler, no attempt has been made to record in a comprehensive way all that has been printed on these subjects during the year, the object having been to select such material as would bring out the general trend of comment.

Reference to articles dealing with the quality of medicinal products are not as numerous as in previous publications of this series as the anaytical reports of many of the foreign pharmaceutical manufacturing houses have not been issued since the beginning of the war. The information of this nature which has been available in this country has been recorded under the heading "Drug Inspection Work," or in tabular form under each specific item.

The continuance of the war in Europe has brought home to the American pharmacist the desirability of becoming independent of Europe in the matter of securing his supplies of drugs and medicines. As a consequence, the cultivation of medicinal plants in the United States has received added attention in our schools of pharmacy as well as in the commercial world. Abstracts of articles pertaining to the cultivation and collection of drugs have therefore been given special consideration in the preparation of this bulletin.

The war in Europe has not only stimulated an interest in the production of drugs, but has brought to our notice in a striking manner the desirability of controlling their use for illegitimate purposes. Especially is this true in the case of the improper use of opium, its alkaloids, and cocaine. In fact, most of the European countries engaged in the present struggle have found it necessary to pass stringent laws prohibiting the sale of these drugs except on the order of a physician. Abstracts of articles showing the prevailing conditions and the action taken in these countries are included under the heading "Sale and use of narcotics."

An added interest in the public health feature of pharmacopœial work has also resulted from the struggle which is at present being waged in Europe. Never before has the public, as well as the physician and surgeon, devoted so much attention to prophylactic measures and with such satisfactory results as at the present time. References to articles which have a bearing in this connection have been included under the headings: "Serums and vaccines," "antiseptics and disinfectants," "arsenic (nonofficial compounds)," etc.

As in previous bulletins of this series, comments on foreign pharmacopœias have been included whenever they have been available. In greater part, these have been recorded under the respective pharmacopœias, but, where they apply to specific items, they have been placed under the comments on official articles.

In conclusion, the compiler desires to express the appreciation of the bureau to the publishers and editors of journals and periodicals furnished in exchange; to the secretaries of state and national pharmaceutical organizations for copies of their annual proceedings; to John Uri Lloyd, of Cincinnati, for copies of the eclectic medical journals; to the editor of Chemical Abstracts for several foreign publications; and to the officers of the library of the Department of Agriculture, the library of the Office of the Surgeon General of the Army, Washington, and the Library of Congress for the use of reports and periodicals not on file in this laboratory.

A. G. D.

Division of Pharmacology,
Hygienic Laboratory,
February 4, 1919.

LIST OF THE LITERATURE REVIEWED.

1. TITLE ABBREVIATIONS—JOURNALS.

Am Druggist.—American Druggist and Pharmaceutical Record, N. Y., 1916, v. 64.

Am. Food J.—American Food Journal (The), Chicago, Ill., 1916, v. 11.

Am. J. Clin. Med.—American Journal of Clinical Medicine, 1916, v. 23.

Am. J. M. Sc.—American Journal of the Medical Sciences, Philadelphia, 1916, v. 152.

Am. J. Pharm.—American Journal of Pharmacy, Philadelphia, 1916, v. 88.

Am. J. Physiol.—American Journal of Physiology, Boston, 1916, v. 40 and 41.

Am. J. Public Health.—American Journal of Public Health, 1916, v. 6.

Am. J. Sc.—American Journal of Science, New Haven, 1916, v. 41 and 42.

Am. J. Trop. Dis.—American Journal of Tropical Diseases and Preventive Medicine, New Orleans, 1916, v. 3, Nos. 6–11.

Am. Med.—American Medicine, 1916, v. 22.

Am. Perf.—The American Perfumer and Essential Oil Review, N. Y., 1916, v. 10, Nos. 11–12; v. 11, Nos. 1–10.

Anales soc. española fis. quim.—Anales de la sociedad española de fisica y quimica, Madrid, 1915, v. 13.

Analyst (The), London, 1916, v. 41.

Ann. Chem.—Justus Liebig's Annalen der Chemie, Leipzig, February, 1916.

Ann. chim. analyt.—Annales de chimie analytique, Paris, 1916, v. 21.

Ann. chim. applicata.—Annali di chimica applicata, Roma, 1916, v. 5.

Ann. Falsif.—Annales des Falsifications, 1916, v. 9.

Apothecary (The), Boston, 1916, v. 13.

Apoth.-Ztg.—Apotheker-Zeitung, Berlin, 1916, v. 31, Nos. 1–22.

Arch. Chem. Mikros.—Archiv für Chemie und Mikroskopie, Wien, 1916, v. 9, Nos. 1 and 2.

Arch. exper. Path. u. Pharmakol.—Archiv. für experimentelle Pathologie und Pharmakologie, 1915, v. 79 and 80.

Arch. farmacol. sper.—Archivio di farmacologia sperimentale e Scienze affini, Sienna, 1916, v. 21 and 22.

Arch. Int. Med.—Archives (The) of Internal Medicine, Chicago, 1916, v. 18.

Archiv Pharm. Chem.—Archiv for Pharmaci og Chemi, Copenhagen, 1916, v. 23.

Arkiv Kem. Min. och Geol.—Arkiv for Kemi, Mineralogi och Geologi, Stockholm, 1916, v. 6, No. 1.

Atti accad. Lincei.—Atti della reale accademie dei Lincei, 1916, v. 25.

Ber. deutsch. chem. Gesellsch.—Berichte der deutschen chemischen Gesellschaft, Berlin, 1916, v. 49.

Biochem. J.—Biochemical Journal, Liverpool, 1916, v. 10.

Biochem. Ztschr.—Biochemische Zeitschrift, Berlin, 1916, v. 76 and 77.

Boll. chim.-farm.—Bolletino Chimico-Farmaceutico, Milan, 1916, v. 55.

Boston M. & S. J.—Boston Medical and Surgical Journal, 1916, v. 174 and 175.

Bot. Gaz.—Botanical Gazette, Chicago, 1916, v. 61.

Brit. & Col. Pharm.—British and Colonial Pharmacist, London, 1916, v. 69, No. 4.

Brit. Food J.—British Food Journal, London, 1916, v. 18.

Brit. M. J.—British Medical Journal, London, 1916, v. 1 and 2.

Bull. Arizona Bd. Health.—Bulletin of the Arizona State Board of Health, 1916, v. 5.

Bull. Assoc. Gén. Syn. Pharm. France.—Bulletin de l'Association Générale des Syndicats Pharmaceutiques de France, 1916, v. 19.

Bull. Bur. Stand.—Bulletins of the Bureau of Standards, U. S. Department of Commerce, 1916, v. 13.

Bull. California Bd. Health.—Monthly Bulletin, California State Board of Health, 1916.

Bull. Colorado Bd. Health.—Annual Bulletin Colorado State Board of Health, 1916.

Bull. Connecticut Bd. Health.—Monthly Bulletin Connecticut State Board of Health, 1916, v. 30.

Bull. Florida Bd. Health.—Bulletin of the Florida State Board of Health, Jacksonville, 1916, v. 11.

Bull. Georgia Dept. Agric.—Bulletin, Georgia Department of Agriculture, 1916, v. 3, Nos. 1 and 2.

Bull. Hyg. Lab.—Bulletins, Hygienic Laboratory, U. S. Public Health Service, 1916, Nos. 101 and 102.

Bull. Illinois Bd. Health.—Bulletin of the Illinois State Board of Health, Springfield, 1916, v. 2.

Bull. Indiana Bd. Health.—Bulletin, Indiana State Board of Health, 1916 v. 19.

Bull. Iowa Bd. Health.—Bulletin, Iowa State Board of Health, Des Moines, 1916.

Bull. Kansas Bd. Health.—Bulletin, Kansas State Board of Health, 1916 v. 12.

Bull. Kentucky Bd. Health.—Bulletin of the State Board of Health of Kentucky, 1916, v. 6 and 7.

Bull. Lab. Inl. Rev. Dept. Canada.—Bulletins of the Laboratory of the Inland Revenue Department, Ottawa, Canada, 1916.

Bull. Louisiana Bd. Health.—Quarterly Bulletin of the Louisiana State Board of Health, 1916, v. 7.

Bull. Maine Bd. Health.—Bulletin of the State Board of Health of Maine, Augusta, 1916, v. 4.

Bull. Massachusetts Bd. Health.—Bulletin, Massachusetts State Board of Health, 1916, v. 3.

Bull. Michigan Bd. Health.—Public Health published by the Michigan State Board of Health, Lansing, 1916.

Bull. Michigan D. & F. Dept.—Bulletin Michigan Dairy and Food Department, 1916, Nos. 244–255.

Bull. Mississippi Bd. Health.—Health Bulletin of the Mississippi State Board of Health, Jackson, 1916, v. 6.

Bull. Missouri Bd. Health.—Quarterly Bulletin of the Missouri State Board of Health, Jefferson City, 1916, v. 6.

Bull. Montana Bd. Health.—Bulletin (special) of the Montana State Board of Health, Helena, 1916.

Bull. Montana Dept. Pub. Health.—Bulletin of the Department of Public Health of the State of Montana, Helena, 1916, v. 9.

Bull. New Hampshire Bd. Health.—Quarterly Bulletin of the State Board of Health of the State of New Hampshire, 1916, v. 4, Nos. 5, 6, 7 and 8.

Bull. New Jersey Agric. Exper. Sta.—Bulletin of the New Jersey Agricultural Station, New Brunswick, 1916, Bull. Nos. 293, 294, 295, 297 and 303.

Bull. New Jersey Dept. Health.—Public Health News Bulletin, Department of Health of the State of New Jersey, 1916, v. 1 and 2.

Bull. New York Agric. Exper. Sta.—Bulletin of the New York Agricultural Experiment Station, Geneva, 1916, Bull. No. 416, 419, 420, 424 and 425.

Bull. New York Dept. Health.—Bulletin, New York State Department of Health, 1916, v. 11.

Bull. New York City Dept. Health.—Bulletin, New York City Department of Health, 1916, v. 5.

Bull. North Carolina Bd. Health.—Bulletin, North Carolina State Board of Health, 1916, v. 31.

Bull. North Dakota Bd. Health.—Bulletin, North Dakota State Board of Health, 1916, v. 9.

Bull. North Dakota Exper. Sta. F. Dept.—Bulletin (Special) of the Food Department of the North Dakota Agricultural Experiment Station, 1916, v. 4.

Bull. Ohio Bd. Health.—Bulletin, Ohio State Board of Health, 1916, v. 7.

Bull. Pharm.—Bulletin of Pharmacy, Detroit, 1916, v. 30.

Bull. Rhode Island Bd. Health.—Bulletin, Rhode Island State Board of Health, 1916, v. 2.

Bull. soc. chim. France.—Bulletin de la société chimique de France, 1916, v. 19 and 20.

Bull sc. pharmacol.—Bulletin des sciences pharmacologiques, Paris, 1916, v. 23.

Bull. South Dakota F. & D. Dept.—Bulletin of the South Dakota Food and Drug Department, 1916, v. 3 and 4.

Bull. U. S. Dept. Agric.—Bulletins of the U. S. Department of Agriculture, 1916.

Bull. Vermont Bd. Health.—Bulletin, Vermont State Board of Health, 1916, v. 16, Nos. 3 and 4; v. 17, Nos. 1 and 2.

Bull. West Virginia Bd. Health.—Bulletin, West Virginia Public Health Council, 1916, v. 3.

Canadian Pharm. J.—Canadian Pharmaceutical Journal, Toronto, 1916, v. 49 and 50.

Carolina J. Pharm.—Carolina Journal of Pharmacy, Chapel Hill, N. C., 1916, v. 2, No. 1.

Centralb. f. Bakteriol.—Centralblatt für Bakteriologie, Parasitenkunde und Infectsionskrankheiten, Jena, 1916, v. 77.

Chem. Analyst.—Chemist-Analyst (The), Phillipsburg, N. J., 1916, Nos. 17–19.

Chem. & Drug.—Chemist and Druggist, London, 1916, v. 88.

Chem. & Drug. Australas.—Chemist and Druggist of Australasia, Sydney and Melbourne, 1916, v. 31.

Chem. Eng.—Chemical Engineer, Chicago, 1916, v. 23 and 24.

Chem. News.—Chemical News, London, 1916, v. 114.

Chem. Weekblad.—Chemisch Weekblad, Amsterdam, 1916, v. 13.

Chem. Zentralbl.—Chemisches Zentralblatt, Berlin, 1916, v. 87.

Chem.-Ztg.—Chemiker-Zeitung, Cöthen, 1916, v. 40.

Circ. Bur. Stand.—Circulars of the Bureau of Standards, U. S. Department of Commerce, 1916.

Cleveland M. J.—Cleveland Medical Journal, 1916, v. 15.

Colorado Med.—Colorado Medicine, Denver, 1916, v. 13.

Com. Rep.—Commerce Reports, Daily Consular and Trade Reports issued by the Bureau of Foreign and Domestic Commerce of the United States Department of Commerce, 1916.

Compt. rend. acad. sc.—Comptes rendus hebdomadaires de séances de l'Acedemie des sciences, Paris, 1916, v. 162 and 163.

Compt. rend. soc. biol.—Comptes rendus des seances de la Société de Biologie, Paris, 1916, v. 79.

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C. U. C. P. Alumni J.—Columbia University College of Pharmacy, Alumni Journal, New York, 1916, v. 23.

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Dental Digest (The), New York, 1916, v. 22.
D.-A. Apoth.-Ztg.—Deutsch-Amerikanische Apotheker-Zeitung, New York, 1916, v. 37.
Deutsch. med. Wchnschr.—Deutsche medizinische Wochenschrift, Berlin, 1916, v. 42.
Drug. Circ.—Druggists Circular, New York, 1916, v. 60.
Drug Topics, New York, 1916, v. 31.
Eclectic M. J.—Eclectic Medical Journal, Cincinnati, 1916, v. 76.
Ellingwood's Therap.—Ellingwood's Therapeutist, Boston, 1916, v. 10.
Exper. Sta. Record.—Experiment Station Record, U. S. Department of Agriculture, 1916, v. 34 and 35.
Farm. Españ.—La Farmacia Española, Madrid, 1916, v. 48.
Gaz. Chim. Ital.—Gazzetta chimica Italiana, Roma, 1916, v. 46.
Hahnemann. Month.—Hahnemannian Monthly, Philadelphia, 1916, v. 51.
J. Agric. Research.—Journal of Agricultural Research, 1916, v. 5, 6, and 7.
J. Am. Chem. Soc.—Journal of the American Chemical Society, 1916, v. 38.
J. Am. Inst. Homœp.—Journal of the American Institute of Homœopathy, Chicago, 1916, v. 8 and 9.
J. Am. M. Assoc.—Journal of the American Medical Association, 1916, v. 66 and 67.
J. Am. Pharm. Assoc.—Journal of the American Pharmaceutical Association, Philadelphia, 1916, v. 5.
J Am. Vet. Med. Assoc.—Journal of the American Veterinary Medical Association, Ithaca, 1916, v. 48 and 49.
J. Assoc. Off. Agric. Chem.—Journal of the Association of Official Agricultural Chemists, Baltimore, 1916, v. 1, No. 4.
J. Biol. Chem.—Journal of Biological Chemistry, New York, 1916, v. 24–27.
J. Chem. Soc. Lond.—Journal of the Chemical Society, London, 1916, v. 109–110.
J. chim. phys.—Journal de chimie physique, Genève et Paris, 1916, v. 14.
J. Exper. M.—Journal of Experimental Medicine, New York, 1916, v. 23 and 24.
J Franklin Institute.—Journal (The) of the Franklin Institute, Philadelphia, 1916, v. 181 and 182.
J H. Hosp. Bull.—Johns (The) Hopkins Hospital Bulletin, Baltimore, 1916, v. 27.
J Hyg.—Journal (The) of Hygiene, Cambridge, 1916, v. 15.
J. Immunol.—Journal of Immunology, Baltimore, 1916, v. 2.
J. Ind. & Eng. Chem.—Journal (The) of Industrial and Engineering Chemistry, Easton, 1916, v. 8.
J. Infec. Dis.—Journal (The) of Infectious Diseases, Chicago, 1916, v. 18 and 19.
J. Iowa State Med. Soc.—Journal of the Iowa State Medical Society, 1916, v. 6.
J. Lab. & Clin. Med.—Journal (The) of Laboratory and Clinical Medicine, St. Louis, 1915–16, v. 1.
Journal-Lancet, The Journal of the Minnesota State Medical Association and Official Organ of the North Dakota and South Dakota State Medical Associations, 1916, v. 36.
J. Linnean Soc. Bot.—Journal of the Linnean Society, Botany, 1915, v. 43.
J. Med. Research.—Journal of Medical Research, Boston, 1916, v. 33 and 34.
J. Path. and Bact.—Journal (The) of Pathology and Bacteriology, Cambridge University, 1916, v. 20.
J. pharm. et chim.—Journal de pharmacie et de chimie, Paris, 1916, v. 12, 13, and 14.
J. Pharmacol. and Exper. Therap.—Journal of Pharmacology and Experimental Therapeutics, Baltimore, 1916, v. 8 and 9.

J. Physiol.—Journal (The) of Physiology, 1916, v. 50.
J. Phys. Chem.—Journal (The) of Physical Chemistry, Ithaca, 1916, v. 20.
J. Proc. Roy. Soc. New South Wales.—Journal and Proceedings of the Royal Society of New South Wales, 1916, v. 50.
J. Roy. Micros. Soc.—Journal of the Royal Microscopial Society, 1916.
J. Roy. Soc. Arts.—Journal of the Royal Society of Arts, London, 1916, v. 64.
J. Soc. Chem. Ind.—Journal of the Society of Chemical Industry, 1916, v. 35.
J. Trop. Med. & Hyg.—Journal (The) of Tropical Medicine and Hygiene, London, 1916, v. 19.
J. Washington Acad. Sc.—Journal of the Washington Academy of Sciences, 1916, v. 6.
Kolloid-Ztschr.—Kolloid-Zeitschrift, Dresden and Leipzig, 1916, v. 19.
Lancet (The), London, 1916, v. 190 and 191.
Lilly Sci. Bull.—Lilly (The) Scientific Bulletin, 1916, No. 7.
Med. Council—Medical (The) Council, Philadelphia, 1916, v. 21.
Med. Rec.—Medical Record, New York, 1916, v. 89 and 90.
Merck's Rep.—Merck's Report, New York, 1916, v. 25.
Meyer Bros. Drug.—Meyer Brothers Druggist, St. Louis, 1916, v. 37.
Midl. Drug.—Midland Druggist and Pharmaceutical Review, Columbus, 1916, v. 50.
Montreal Pharm. J.—Montreal Pharmaceutical Journal, 1916, v. 27.
Mulford's Vet. Bull.—Mulford's Veterinary Bulletin, Philadelphia, 1916, v. 7 and 8.
N. A. R. D. J.—N. A. R. D. Journal, The Official Organ of the National Association of Retail Druggists, Chicago, 1916, v 21, 22, and 23.
Nat. Druggist.—National (The) Druggist, St. Louis, 1916, v. 46.
National Drug Clerk (The), Chicago, 1916, v. 4.
Nat. Eclect. M. Assoc. Quart.—The National Eclectic Medical Association Quarterly, Cincinnati, 1916, v. 7, No. 3 and 4; v. 8, No. 1 and 2.
Nature, London, 1916, v. 96, 97, and 98.
New Idea (The), Detroit, 1916, v. 38.
New York M. J.—New York Medical Journal, 1916, v. 103–104.
Norges Apotek. Tidsskr.—Norges Apotekerforenings Tidsskrift, Kristiania, 1916, v. 24.
Northwestern Druggist, (The), Minneapolis, 1916, v. 17.
Oil, Paint & Drug Rep.—Oil, Paint, and Drug Reporter, New York, 1916, v. 90.
Pacific Pharm.—Pacific (The) Pharmacist, San Francisco, 1916, v. 9 and 10.
Pennsylvania Med. J.—Pennsylvania Medical Journal, Athens, 1916, v. 19 and 20.
Perf. & Ess. Oil Rec.—Perfumery and Essential Oil Record, London, 1916, v. 7.
Pharm. Era.—Pharmaceutical (The) Era, New York, 1916, v. 49.
Pharm. J.—Pharmaceutical (The) Journal, London, 1916, v. 96 and 97.
Pharm. Post.—Pharmazeutische Post, Vienna, 1916, v. 49, Nos. 1–20.
Pharm. Weekblad.—Pharmaceutisch Weekblad, Amsterdam, 1916, v. 53.
Pharm. Ztg.—Pharmazeutisch Zeitung, Berlin, 1916, v. 61.
Pharm. Zentralh.—Pharmazeutische Zentralhalle für Deutschland, Dresden, 1916, v. 57.
Philippine J. Sc.—Philippine Journal of Science, 1916, v. 11, Sec. A, B, C, and D.
Phil. Mag.—The London, Edinburgh, and Dublin Philosophical Magazine and Journal of Science, 1916, v. 31 and 32.
Physiol. Abstr.—Physiological Abstracts, London, 1916, v. 1.

Pract. Drug.—Practical (The) Druggist and Pharmaceutical Review of Reviews, New York, 1916, v. 34.

Practitioner (The), London, 1916, v. 96 and 97.

Proc. Nat. Acad. Sci.—Proceedings of the National Academy of Sciences, Washington, 1916, v. 2.

Proc. Roy. Soc. Lond.—Proceedings of the Royal Society, London, 1916, v. 89 and 92.

Proc. Soc. Exper. Biol. and Med.—Proceedings of the Society for Experimental Biology and Medicine, 1916, v. 13.

Proceedings of State pharmaceutical associations:

Proc. Alabama Pharm. Assoc. 1916.
Proc. California Pharm. Assoc. 1916.
Proc. Connecticut Pharm. Assoc. 1916.
Proc. Florida Pharm. Assoc. 1916.
Proc. Georgia Pharm. Assoc. 1916.
Proc. Illinois Pharm. Assoc. 1916.
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Proc. Ohio Pharm. Assoc. 1916.
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Proc. South Carolina Pharm. Assoc. 1916.
Proc. South Dakota Pharm. Assoc. 1916.
Proc. Texas Pharm. Assoc. 1916.
Proc. Utah Pharm. Assoc. 1916.
Proc. Washington Pharm. Assoc. 1916.
Proc. West Virginia Pharm. Assoc. 1916.
Proc. Wisconsin Pharm. Assoc. 1916.

Public Health Rep.—Public Health Reports, Washington, 1916, v. 31, Nos. 1–52.

Pure Products, New York, 1916, v. 12.

Répert. pharm.—Repertoire de pharmacie, Paris, 1916, v. 28, part 1.

Rep. Chem. Lab. Am. M. Assoc.—Annual Reports of the Chemical Laboratory of the American Medical Association, Chicago, 1916, v. 9.

Rep. Connecticut D. and F. Com.—Report of the Connecticut Dairy and Food Commissioner, 1916.

Rep. District of Columbia Health Off.—Report of the Health Officer of the District of Columbia, 1916.

Rep. Florida Bd. Health.—Twenty-eighth Annual Report of the State Board of Health of Florida, 1916.

Rep. Florida Dept. Agric.—Fourteenth Biennial Report of the Department of Agriculture of the State of Florida, 1915 and 1916.

Rep. Kansas Bd. Health.—Eighth Biennial Report of the Kansas State Board of Health, 1916.

Rep. Maine Agric. Exper. Sta.—Thirty-second Annual Report of the Maine Agricultural Experiment Station, 1916.
Rep. Massachusetts Bd. Health.—Second Annual Report of the State Department of Health of Massachusetts, 1916.
Rep. Missouri F. and D. Com.—Annual Report of the Food and Drug Commissioner to the Governor of the State of Missouri, 1916.
Rep. Nebraska F., D., D., and O. Com.—Biennial Report of the Food, Drug, Dairy, and Oil Commission to the Governor of the State of Nebraska, Lincoln, 1914–1916.
Rep. Nevada Agric. Exp. Sta.—Report of the Nevada Agricultural Experiment Station, 1916.
Rep. New Jersey Dept. Health.—Fortieth Annual Report of the Department of Health of the State of New Jersey, 1916.
Rep. North Dakota Agric. Exper. Sta.—Report of the Director of the North Dakota Agricultural Experiment Station, 1916.
Rep. North Dakota F. Com.—Twelfth Annual Report of the North Dakota Food Commissioner and State Chemist, 1915.
Rep. Rhode Island F. & D. Com.—Seventh Annual Report of the Board of Food and Drug Commissioners, Rhode Island, 1916.
Rep. South Carolina Com. Agric. Com. & Ind.—Thirteenth Annual Report of the Commissioner of Agriculture, Commerce, and Industries of the State of South Carolina, Columbia, 1916.
Rep. South Dakota F. & D. Com.—Sixteenth Annual Report of the Food and Drug Commissioner of South Dakota, 1916.
Rep. Tennessee F. & D. Dept.—Annual Report of the Food and Drug Department, State of Tennessee, 1916.
Rep. Therap. Res. Com.—Annual Report of Investigations of the Therapeutic Research Committee of the Council on Pharmacy and Chemistry of the American Medical Association, Chicago, 1916, v. 5.
Rep. Utah D. & F. Com.—Tenth Biennial Report of the State Dairy and Food Commissioner of the State of Utah, 1915–1916, Salt Lake City, 1916.
Rep. Virginia D. & F. Com.—Quarterly Report of the Dairy and Food Commissioner of Virginia, Richmond, 1916.
Rep. Virginia D. & F. Com.—Annual Report of the Dairy and Food Commissioner of Virginia, Richmond, 1916, Bull. No. 63.
Rep. Wyoming D. F. and O. Com.—Twelfth Annual Report of the Dairy, Food and Oil Commissioner, 1916.
Retail Druggist, Detroit, 1916, v. 23.
Rev. farm.—Revista farmaceutica, Buenos Aires, 1916, v. 59.
Rocky Mountain Druggist (The), Denver, 1916, v. 30.
Schweiz. Apoth.-Ztg.—Schweizerische Apotheker-Zeitung, Zürich, 1916, v. 54.
Science, New York, 1916, v. 44.
Sci. Am.—Scientific American, 1916, v. 114 and 115.
Sci. Papers Bur. Stand.—Scientific Papers of the Bureau of Standards, U. S. Department of Commerce, 1916.
Simmons' Spice Mill, New York, 1916, v. 39.
Southern Med. J.—Southern Medical Journal, 1916, v. 9.
Southern Pharm. J.—Southern (The) Pharmaceutical Journal, Dallas, 1916, v. 8, Nos. 5 to 12; v. 9, Nos. 1 to 4.
Spatula (The), Boston, 1916, v. 22 and 23.
S. R. A.-Chem.—Service and Regulatory Announcements, United States Department of Agriculture, Bureau of Chemistry, 1916.
Südd. Apoth.-Ztg.—Süddeutsche Apotheker-Zeitung, Stuttgart, 1916, v. 56.
Svensk Farm. Tidskr.—Svensk Farmaceutisk Tidskrift, Stockholm, 1916, v. 20.

Tech. Papers Bur. Stand.—Technologic Papers of the Bureau of Standards, U. S. Department of Commerce, 1916.
Therap. Gaz.—Therapeutic Gazette, Detroit, 1916, v. 40.
Tr. Am. Inst. Chem. Eng.—Transactions of the American Institute of Chemical Engineers, New York, 1916, v. 9.
U. S. Naval Med. Bull.—United States Naval Medical Bulletin, 1916, v. 10.
Virginia Pharmacist (The), Richmond, 1916, v. 1.
Western Druggist (The), Chicago, 1916, v. 38.
West. Pennsylvania Ret. Drug.—Western Pennsylvania Retail Druggist, 1916.
Wis. Med. J.—Wisconsin (The) Medical Journal, Milwaukee, 1916, v. 14 and 15.
Wyoming (The) Farm Bull.—University of Wyoming Agricultural College and United States Department of Agriculture cooperating, 1916, v. 6, Nos. 2, 3, 4, 5 and 6.
Yearbook of Pharmacy (and Transactions of the British Pharmaceutical Conference), London, 1916.
Zentralbl. Biochem. u. Biophys.—Zentralblatt für Biochemie und Biophysik, Berlin, 1915, v. 18.
Ztschr. anal. Chem.—Zeitschrift für analytische Chemie, Wiesbaden, 1916, v. 55.
Ztschr. angew. Chem.—Zeitschrift für angewandte Chemie, Leipzig, 1916, v. 29.
Ztschr. anorg. Chem.—Zeitschrift für anorganische und allgemeine Chemie, Leipzig, 1916, v. 97 and 98.
Ztschr. Unters. Nahr.- u. Genussm.—Zeitschrift für Untersuchung der Nahrungs- und Genussmittel, Berlin, 1916, v. 31.

2. TITLE ABBREVIATIONS—PHARMACOPŒIAS AND NONOFFICIAL STANDARDS.

Ph. Arg. I.—Farmacopea Nacional Argentina, Primera edición, 1898.
Ph. Austr. VIII.—Pharmacopœa Austriaca, editio octava, 1906.
Ph. Belg. III.—Pharmacopœa Belgica, editio tertia, 1906.
Ph. Brit. V.—British Pharmacopœia, 1914.
Ph. Chil. I.—Farmacopea Chilena, 1886.
Ph. Dan. VII.—Pharmacopœia Danica, 1907.
Ph. Fenn. V.—Pharmacopœa Fennica, edito quinta, 1914.
Ph. Fr. V.—Codex Medicamentarius Gallicus, Pharmacopée Francaise, 1902.
Ph. Germ. V.—Deutsches Arzneibuch, 5, Ausgabe, 1910.
Ph. Helv. IV.—Pharmacopœa Helvetica, editio quarta, 1907.
Ph. Hisp. VII.—Farmacopea Oficial Española, séptima edicion, 1905.
Ph. Hung. III.—Pharmacopœa Hungarica, editio tertia, 1909.
Ph. Ital. III.—Farmacopea ufficale del regno d'Italia, Terza edizione, 1909.
Ph. Japon. III.—The Pharmacopœia of Japan, 1906 (English translation, 1907).
Ph. Mex. IV.—Nueva Farmacopea Mexicana, cuarta edición, 1904.
Ph. Ndl. IV.—Pharmacopœa Nederlandica, editio quarta, 1905.
Ph. Norv. IV.—Pharmacopœa Norvegica, editio quarta, 1913.
Ph. Ross. VI.—Pharmacopœa Rossica, sixth edition, 1910.
Ph. Serv. II.—Pharmacopœia Serbica, editio secunda, 1908.
Ph. Svec. IX.—Pharmacopœa Svecica, 1908.
Ph. Ven. I.—Farmacopea Venezolana, 1898.
U. S. P. VIII and IX.—Pharmacopœia of the United States, 8th Rev., 1905 and 9th Rev. 1916.
N. F. III and IV.—The National Formulary, 3rd Rev., 1906, and 4th Rev., 1916.
N. N. R.—New and Nonofficial Remedies, Chicago, 1914.
B. P. C.—British Pharmaceutical Codex, London, 1911.

DIGEST OF COMMENTS ON THE PHARMACOPŒIA OF THE UNITED STATES OF AMERICA AND ON THE NATIONAL FORMULARY.[1]

I. GENERAL COMMENTS.

I. LEGAL STATUS AND DEVELOPMENT.

1. PURE FOOD AND DRUG LAWS.

Anon.: A synopsis of the food and drug laws enacted by Congress and the various State legislatures during the year 1915.—Am. Food J. 1916, v. 11, p. 59–63.

Anon.: A book review calls attention to a volume entitled "State Pure Drug Laws Enacted Since the Passage of the National Food and Drugs Act, June 30, 1906, with a Reprint of Said Act as Amended." The volume is published by The Proprietary Association of the National Wholesale Druggists' Association.—Northwestern Druggist (The), 1916, No. 3, p. 45.

Beal, J. H.: In discussing desirable legislation as an aid to maintain pharmacy, the author states that the terms used in the drafting of legislative measures should, as far as possible, be self-interpreting. Such general terms as "derivatives," "synthetic substances," "physiological equivelants," "habit-forming drugs," "narcotic drugs," "poisons," "poisonous drugs," etc., should be avoided, unless accompanied by qualifications and definitions which clearly limit the sense in which they are to be understood.—J. Am. Pharm. Assoc. 1916, v. 5, p. 256–259; see also Pharm. Era, 1916, v. 49, p. 105; Drug. Circ. 1916, v. 60, p. 698.

England, J. W.: Attention is directed to the fact that legislation of recent years has given the power of making rules and regulations for carrying out the provision of various acts to administrative departments of the Government, and that there is great danger of this power being abused through the zeal of such departments in attempting to make a public reputation for efficiency, that these departments may become unreasonable and bureaucratic and frame regulations that would be a serious handicap to the drug trade as a whole.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1163–1164.

Alsberg, C. L.: In the opinion of the Bureau of Chemistry, an article sold under a name recognized in the index, but not appearing in the text, of the United States Pharmacopœia is a drug within the

[1] Manuscript submitted for publication Feb. 8, 1919.

meaning of section 6 of the Federal food and drugs act. It must, therefore, comply with the standard of strength, quality or purity as determined by tests laid down in the U. S. P. official at the time of investigation.—S. R. A. Chem. 1916, No. 16, p. 30.

Anon.: To attempt the correction of the shortcomings in the observation, interpretation, and application of pharmacy laws and supplemental statutes, the National Drug Trade Conference, in December, 1915, appointed a special committee on the interpretation and enforcement of food and drug laws.—N. A. R. D. J. 1916, v. 22, p. 1069.

La Wall, Chas. H.: An enumeration of some specific instances in which the pharmacist comes in contact with the food laws.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 254–259.

Editorial: Federal food and drug acts vigorously enforced. A review of the cases tried during the fiscal year for the violation of these laws.—Apothecary (The), 1916, v. 13, No. 11, p. 15.

Anon.: In a comparison of the insecticide act and the food and drugs act, it is stated that the citizen may not be defrauded by the sale of a worthless louse killer, but his Government offers him little protection against the sale of a worse-than-worthless consumption "cure."—J. Am. M. Assoc. 1916, v. 67, p. 2019–2020.

Du Bois, Gustave: An article pointing out the necessity of proper tariff legislation to influence the development of the manufacture of medicinal chemicals in the United States.—J. Ind. & Eng. Chem. 1916, v. 8, p. 1156–1158.

Rusby, H. H.: A criticism of a ruling by the Federal court for the northern district of Illinois permitting the sale of charlock as mustard.—Drug. Circ. 1916, v. 60, p. 394–395.

Editorial: A discussion of the appropriateness of the New York patent medicine ordinance. It is thought to be unjust.—Am. Druggist, 1916, v. 64, No. 1, p. 21.

2. SALE AND USE OF POISONS.

Editorial: A review of an article on the sale and use of poisons emphasizing the need for a national poison law.—J. Am. M. Assoc. 1916, v. 66, p. 1161.

Anon.: The National Association of Retail Druggists, at its last annual meeting, passed a resolution favoring an amendment to the postal laws that will make it possible to send medicines containing poisons through the mails under such restrictions as to packing and so on as will prevent their possible injury to the mails or to those handling the same.—N. A. R. D. J. 1916, v. 22, p. 1351.

Anon.: Admission to the domestic mails of medicinal products which contain poisons in only sufficient quantity and form in com-

bination with other ingredients to be used exclusively as a curative remedy or remedial substances, and which are not dangerous or injurious to life, safety, health, or property, is proposed in a bill recently introduced into the House of Representatives by Representative Griffin of New York. The article mailed is to bear the label or superscription of the manufacturer thereof or dealer therein, or of the licensed physician, pharmacist, dentist, or veterinarian preparing or prescribing the same.—J. Am. M. Assoc. 1916, v. 66. p. 826.

Anon.: A resolution to amend the present regulations to permit the shipping of poisons by mail.—Proc. North Dakota Pharm. Assoc. 1916, p. 38–39.

Anon.: A review of reprint No. 330 from the Public Health Reports, United States Public Health Service, states that the publication is a valuable and convenient reference book of all narcotic and poison laws and, therefore, should be of particular interest to all branches of the drug trade.—J. Am. Pharm. Assoc. 1916, v. 5, p. 899; also J. Am. M. Assoc. 1916, v. 67, p. 442.

Editorial: The use of poison has always been a prominent method employed by those who voluntarily destroy their own lives. According to the Bureau of Census, the number of suicides reported in 1914 was 10,933, or 16.6 per hundred thousand population. Of this number, 3,000 accomplished self-destruction by the use of poison.—J. Am. M. Assoc. 1916, v. 66, p. 428.

Eberle, E. G.: In a discussion of the inconsistencies in drug legislation it is stated that S. W. Lambert and H. S. Patterson in reporting on the suicides by poisoning in New York City during five years classify the cases as follows: Paris green and arsenic, 48; phenol, 154; opium and morphine, 29; mercuric chloride, 104; illuminating gas, 1,554, other poisons, 237.—J. Am. Pharm. Assoc. 1916, v. 5, p. 126–127.

Anon.: A reprint of the new decree governing the sale and use of poisons in France.—J. pharm. et chim. 1916, v. 14, p. 247–255, 279–287.

3. SALE AND USE OF NARCOTIC DRUGS.

Hilton, S. L.: The narcotic drug content of a number of the N. F. preparations has been reduced in order to comply with the exceptions of section 6 of the Harrison law.—Bull. Pharm. 1916, v. 30, p. 281.

Van Zandt, C.: A discussion of the narcotic question with respect to the entire world.—Rocky Mountain Druggist (The), Denver, 1916, v. 30, No. 10, p. 17–23.

Wilbert, M. I.: A review of recent legislation designed to restrict the use of narcotic drugs.—Public Health Rep., 1916, v. 31, p. 114–119.

Mandabach, P. A.: The Harrison Narcotic Law Catechism. An explanation of the important features of the Harrison law in the form of questions and answers.—Nat. Drug Clerk, 1916, v. 4, p. 66–67, 69; also Apothecary, 1916, v. 13, No. 2, p. 22–23.

Hoback, Fred H.: A discussion of the Harrison law, with special reference to "dope" prescriptions.—Virginia Pharmacist (The), Richmond, 1916, v. 1, p. 13–14.

Noonan, Harry: A discussion of some of the incongruities of the Harrison law.—Pract. Drug., 1916, v. 34, No. 3, p. 42.

Anon.: A new Treasury decision on the Harrison law requires that the amount of narcotic per ounce or per tablet must be given on the order form only when the preparations are not U. S. P. or N. F.—Bull. Pharm., 1916, v. 30, p. 128.

Editorial: Attention is called to the fact that discrepancies in accounting for small quantities of narcotic drugs will occur in the most carefully regulated pharmacies owing to unavoidable loss in dispensing.—Am. Druggist, 1916, v. 64, No. 1, p. 20.

Lederer, Ephriam: In a discussion of the Harrison narcotic act, the author concludes that the law is fully justified and the slight amount of trouble and inconvenience caused by its administration should be cheerfully undergone, for the sake of the general welfare, by those to whom the act applies.—J. Am. Pharm. Assoc., 1916, v. 5, p. 720–723.

Craycroft, C. E.: Greater familiarity with the practical working of the Harrison antinarcotic law is demonstrating the fact that great good is being accomplished by its enforcement. Thousands of unfortunate habitués have taken treatment for their drug cravings and have been cured thereof. There seems to be a general disposition to feel that the law is proving a great success.—Proc. Texas Pharm. Assoc., 1916, p. 12.

Editorial: In many ways the year's experience with the Harrison narcotic law is favorable to its continuation in its present form. Its real effectiveness, however, appears to be much restricted by a recent decision of the United States Supreme Court which holds that the possession of narcotic drugs by persons not specifically authorized to have them can not constitute the basis for a conviction on the charge of conspiracy. The decision practically nullifies the language of section 8 of the law which declares it to be unlawful for any person not authorized to have such drugs in his possession.—Pharm. Era, 1916, v. 49, p. 264.

Editorial: The good intentions of our lawmakers and the aims and purposes of the Harrison antinarcotic law have been practically nullified because of the fact that possession of narcotics by unlicensed persons was not qualified in the law.—Pract. Drug., 1916, v. 34, No. 9, p. 17–18.

Anon.: An editorial discussing the refilling of narcotic prescriptions states that section 6 of the Harrison Act is wholly and indefensibly pernicious.—J. Am. M. Assoc. 1916, v. 67, p. 958.

Anon.: The concluding lines of section 6 of the Harrison narcotic law are stated to be a joker which gives the Coca-Cola Co. a valuable business asset and a monopoly in the distribution of dope.—West. Pennsylvania Ret. Drug. 1916, May, p. 10.

Anon.: An editorial discussing State rights and State duties in their relation to the Harrison narcotic law.—J. Am. M. Assoc. 1916, v. 67, p. 37–38.

Anon.: A reprint of some of the proposed amendments of the Harrison narcotic law.—Oil, Paint & Drug Rep. 1916, v. 90, No. 24, p. 16.

Anon.: It is the belief of the National Drug Trade Conference that amendments to the Harrison law during the present session of Congress are inadvisable for the reason that the measure is now in its formative period.—Bull. Pharm. 1916, v. 30, p. 2.

Anon.: A resolution passed by the National Association of Retail Druggists reads as follows: "*Resolved*, That all efforts to amend the Harrison law by the elimination of section 6 be fervently opposed, and that, if any changes are contemplated in the law, we lend our support to those measures which would tend to strengthen, rather than weaken, the law."—N. A. R. D. J. 1916, v. 22, p. 1351.

Bishop, Ernest S.: The two definite and urgent problems in the regulation of the sale of habit-forming drugs are the suppression of illicit and illegitimate traffic in narcotics and the handling of the unfit who has become an addict, whether he be unfit through criminality, inherent degeneration or deterioration, misfortune, or ignorance.—Oil, Paint & Drug Rep. 1916, v. 90, No. 26, p. 17.

Editorial: In a discussion of the regulation of the sale of narcotics, it is stated that the first demand which should be made—the first immediate necessity—the absolute essential to any intelligent action tending to abolish the drug evil must be the complete facts as to manufacture, distribution, importation, and exportation of opium derivatives.—Oil, Paint & Drug Rep. 1916, v. 90, No. 26, p. 13.

Editorial: The cure for existing conditions as regards the distribution and illicit consumption of habit-forming drugs must be found in the united action of not alone the Community, the State, and the Nation, but in international agreement with border countries, in addition to which must be perfected some system of national control either through the form of excise law or bonded warehouse system or other safeguard, which shall follow the progress of the narcotic from the time of its manufacture till its final distribution to the individual.—Oil, Paint & Drug Rep. 1916, v. 90, No. 27, p. 13.

Beal, J. H.: As a corollary to making the legality or illegality of the sales of intoxicating or narcotic preparations depend upon the

purposes for which they are sold, antiliquor and antinarcotic laws should be reformed so as to provide suitable penalties for those who obtain them either surreptitiously or otherwise than to use for their proper and legitimate purposes. The penalties will then be fitted to the criminal as well as to the crime.—Drug. Circ. 1916, v. 60, p. 700.

Editorial: In a discussion of pending legislation, it is stated that no one State at present has a model narcotic law, even the Federal enactment has been tried in the courts and has been found wanting, but in the serious consideration, and possible adoption of the best features of the laws now operative in the individual States lies a wonderful opportunity for the eventual adoption of a narcotic measure which shall err neither on the side of laxity nor in its radical restrictions.—Oil, Paint & Drug Rep. 1916, v. 90, No. 20, p. 13.

Editorial: The willingness of the physician and pharmacist to comply with the provisions of the Harrison antinarcotic law is indicated by the fact that considerably less than one-half of 1 per cent of the prosecutions for infractions of the law were against men of these professions.—Drug. Circ. 1916, v. 60, p. 65–66.

Eberle, E. G.: In a short editorial, it is stated that the wording of the Federal narcotic law clearly indicates that State cooperation was expected and deemed essential for carrying out the moral end, but this was not fully recognized until now. Many have opposed contemplated State regulations, believing that these were simply duplicate annoyances without accomplishing any more than could be effectively done under the Harrison law. Such inaction is no longer excusable and, as soon as possible, the State narcotic measures should be so amended that they will apply to violations beyond the reach of the Federal law.—J. Am. Pharm. Assoc. 1916, v. 5, p. 682–683.

Anon.: Resolutions empowering its committee on narcotic legislation to draft the State measure for regulating the prescribing and distribution of habit-forming drugs in New York and other States were adopted by the American Medical Editors' Association at their annual meeting held October 25, 1916.—Oil, Paint & Drug Rep. 1916, v. 90, No. 20, p. 16.

Anon.: The New England Association of Boards of Pharmacy at its annual meeting in Boston adopted resolutions announcing the determination to suppress the sale of narcotic drugs within the jurisdiction of its members, and to close such stores as refuse to comply with the State laws and regulations.—Oil, Paint & Drug Rep., 1916, v. 90, No. 26, p. 17.

Anon.: The continuous use of small doses of a narcotic drug is just as capable of establishing a habit as in the case of larger doses.—J. Am. M. Assoc., 1916, v. 66, p. 1156.

Newcomb, E. L.: The proper control of the use of narcotics in small amounts is as important as the control of preparations con-

taining larger amounts.—Proc. Minnesota Pharm. Assoc., 1916, p. 56.

Anon.: One sad result of current legislation has been the depriving of addicts of narcotic supplies without any provision for their adequate and humane care or cure.—Am. J. Clin. Med., 1916, v. 23, p. 972.

Editorial: The position of the drug addict varies with the viewpoint of the observer. The police authorities see him as a criminal, the alienist as a weakling or a degenerate, and the public as a habitué and, all too frequently, a curse to himself and society in general. The addict, however, sees himself as a sick man and one who needs the attention of a friendly physician and, in his estimation, he needs a cure and not the prolongation of further suffering.—Pharm. Era, 1916, v. 49, p. 137.

McIver and Price: From an analysis of 147 cases of drug addiction treated at the Philadelphia General Hospital, it was concluded that, while the medical profession has had much to do with the formation of the morphine habit, and in former years with the development of the cocaine habit, it has had little or nothing to do with the remarkable development and spread of the cocaine and especially the heroin habit during the last few years.—J. Am. M. Assoc. 1916, v. 66, p. 476–480.

Editorial: Justice Cornelius F. Collins is credited with the statement that American firms are shipping drugs to Canada in quantities vastly beyond the possible Canadian consumption and that these drugs eventually find their way into the underworld and are returned to the United States.—Oil, Paint & Drug. Rep. 1916, v. 90, No. 23, p. 13. For replies to the accusation of Justice Collins, see No. 24, p. 13, 16.

Anon.: Bulletin No. 2 issued by the publicity committee of the Pennsylvania Pharmaceutical Association states that declarations made by the jobbing and manufacturing interests indicate that the total amount of narcotic drugs imported and sold has been reduced about 80 per cent since the Harrison law has gone into effect.—J. Am. Pharm. Assoc. 1916, v. 5, p. 181.

Anon.: The Illinois antinarcotic law is said to be superior to most other measures of a similar nature, as it restricts the retail of narcotics absolutely to registered pharmacists.—Bull. Pharm. 1916, v. 30, p. 2.

Anon.: A review of reprint No. 330 from the Public Health Reports states that this valuable pamphlet contains copies of the poison and narcotic laws enacted by the several States, as well as data concerning germane Federal statutes, and that the whole is made more valuable by an extensive analytical index.—Drug. Circ. 1916, v. 60, p. 493.

4. SALE AND USE OF HOUSEHOLD REMEDIES.

Anon.: A summary of the general results of the 1914 census of manufactures for the production of druggists' preparations, patent and proprietary medicines and compounds, and perfumery and cosmetics has been issued by Director S. L. Rogers, of the Bureau of the Census, Department of Commerce. It consists of a statement of the quantities of the anesthetic and narcotic drugs used as ingredients of the products manufactured. The figures are preliminary and are subject to such change and correction as may become necessary upon further examination of the original returns.—N. A. R. D. J. 1916, v. 22, p. 1249.

Beal, James H.: Report of the commission on proprietary medicines of the American Pharmaceutical Association.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1374–1381, 1382–1389; Nat. Druggist, 1916, v. 46, p. 406–410; N. A. R. D. J. 1916, v. 23, p. 406–411.

Anon.: During the year the Proprietary Association of America has been engaged in examining the preparations of various manufacturers with the idea of excluding from the association such members as do not comply with the standard of ethics officially adopted. At the annual convention held in New York, it was reported that 1,078 preparations had been submitted for examination and that 611 of these had been passed upon.—Bull. Pharm. 1916, v. 30, p. 260.

Anon.: A committee of the American Medical Association has requested President Wilson to appoint a commission to investigate the patent-medicine business, which, they state, is to a large extent an evil of national scope.—Pharm. Era, 1916, v. 49, p. 150.

Gilkey, Harry A.: In an article entitled "Fake preparations" the author states that home treatment of ailments is hazardous at best, and certainly is not to be encouraged. The actual need for any medicine, for that matter, and the proper general treatment should only be determined by a physician. Nevertheless, those who are fair-minded must admit that there are many preparations of merit among the patent and proprietary remedies.—Northwestern Druggist (The), 1916, v. 17, No. 4, p. 39.

Editorial: Without considering the question of self-medication, it appears that the greatest menace to the public from proprietary medicines arises from fraudulent advertising and the purely commercial exploitation which is back of the sale of some remedies of this class.—Northwestern Druggist (The), 1916, v. 17, No. 8, p. 24.

Editorial: An argument in favor of the use of standard proprietary remedies.—Southern Pharm. J. 1916, v. 8, p. 1066.

Merrill, Theodore C.: A discussion of some of the important aspects of the use of proprietary medicines in the home treatment of children.—Am. J. Public Health, 1916, v. 6, p. 479–485.

Alsberg, Carl L.: The mother in giving proprietary remedies is governed by false ideas of economy and convenience, and the truth should be presented to her by all possible means. The physician has a public and a professional duty in the education of the public on this vital subject. The dealer is concerned solely from the business standpoint. The solution lies in an educated public opinion.—J. Am. M. Assoc. 1916, v. 66, p. 57.

Anon.: The Government has the right and it is its duty to protect the uninformed public against the flagrant evil of the patent-medicine traffic. It should protect the public against advertisements that are framed to suggest or create ailments with their attendant miseries; it should protect the public against being deluded by false promises of cure; against drugs that may and do work positive harm; against the veil of mystery that makes abuses possible.—J. Am. M. Assoc. 1916, v. 66, p. 756.

Editorial: The strong effort of the American Medical Association to discourage the use of patent and proprietary remedies does not seem as yet to have any great effect since, in the five-year period (1909–1914), the increase in the number of producing establishments amounts to 8.7 per cent, while the increase in the value of the products amounts to 26.1 per cent.—Midl. Drug. 1916, v. 50, p. 479.

Editorial: There is no reason why the proprietary remedy should be denounced in a wholesale way. There are a great many useful, convenient, and beneficent remedies on sale that are a blessing to the community. The inconvenience and suffering that would be caused if they could no longer be obtained is inconceivable. And the differences between a popular and an "ethical" remedy is growing less as time goes on.—Northwestern Druggist (The), 1916, v. 17, No. 1, p. 21.

Anon.: In the 1915–16 report of the A. Ph. A. Commission on Proprietary Medicines, it is stated that it is the professional right of the pharmacist, sanctioned by custom and tradition, to keep proprietary remedies in stock whether manufactured by himself or by others and to supply them to the general public on demand. In meeting the demand for ready-made or package remedies the pharmacist should refrain from usurping the proper functions of the physician, especially in regard to diagnosis.—Pharm. Era, 1916, v. 49, p. 424.

Boberg, Otto: The character of the so-called prescription remedies should be denounced by the pharmacist and the methods of advertising the same should be disapproved.—Proc. Wisconsin Pharm. Assoc. 1916, p. 57–58.

Robin, D. N.: A discussion of the possibility of a national line of nonsecrets, to be prepared by the individual, but with common

ownership of copyrighted labels.—J. Am. Pharm. Assoc. 1916, v. 5, p. 697.

Anon.: An editorial discussing objectionable features in the advertising of patent medicines.—J. Am. M. Assoc. 1916, v. 67, p. 957–958, 1603.

Anon.: An enumeration of the methods by which secret remedies do harm to those using them, together with recommendations for overcoming this evil.—Rep. North Carolina Bd. Health, 1915–16, p. 51–58.

Editorial: The "Open formula" bugbear. Slowly but surely the public is coming to realize that one of the most effective ways of discouraging fraud in the "patent medicine" business will be to demand that the names and quantities of the potent ingredients of all "patent medicines" be declared on the label.—J. Am. M. Assoc. 1916, v. 67, p. 752.

Editorial: As druggists see it, the advantage to the manufacturer of putting up preparations according to a secret formula is that he can put in or leave out any ingredient he chooses, as the conditions of the market, his respect for the law, or other circumstances may dictate.—J. Am. M. Assoc. 1916, v. 67, p. 884.

Editorial: A bill to prohibit fraudulent advertising in the District of Columbia was signed May 29. The bill is designed, among other things, to prevent quack doctors and fake dentists from advertising their fraudulent nostrums, impossible methods, and alleged results.—J. Am. M. Assoc. 1916, v. 66, p. 1862.

News Note: The Department of Health of New York labels patent medicines. The "Goldwater registry law," requiring that all patent medicines have a proper declaration label on the outside or that the seller declare the contents to the board of health, went into effect on January 1, 1916. Several days before this date 300 inspectors from three bureaus of the department of health started to canvass 2,494 drug stores in Greater New York and place labels on 5,000,000 packages of patent medicines.—J. Am. M. Assoc. 1916, v. 66, p. 125.

Anon.: Bills which aim to compel patent medicine manufacturers to make public the exact composition of their nostrums have been introduced in the New York Legislature simultaneously by Assemblyman Fertig and Senator Hamilton.—J. Am. M. Assoc. 1916, v. 66, p. 824.

Mouschinski, M.: An account of the use of certain domestic remedies in the Caucasus.—Chem. Abstr. 1916, v. 10, p. 1908, from Pharmazeutizeski J. 1915, p. 487; see also J. pharm. et chim. 1916, v. 13, p. 162–164.

Anon.: Under the caption "Old women's remedies" the author discusses a number of folk remedies for common ailments.—Pharm. J. 1916, v. 96, p. 495–496.

Anon.: A list of some of the European proprietaries which have appeared on the market recently.—Drug. Circ. 1916, v. 60, p. 34.

Anon.: A book review of a volume entitled *Quack Medicines*, published by the Dutch Society for Combating Quackery, states that the analyses of 586 different proprietary medicines are given.—Chem. & Drug. 1916, v. 88, p. 121.

Anon.: Notes on the composition of some nostrums.—N. A. R. D. J. 1916, v. 22, p. 788–792, 837–839, 1073 from "Medical Frauds," compiled by the Indiana Board of Health.

Anon.: A list of alcoholic medicinal preparations for the sale of which the United States liquor dealer's tax is required.—Virginia Pharm. 1916, v. 1, p. 73–77.

Johnson, Alma K.: A compilation of the results of the analyses of a number of widely advertised nostrums and patent medicines preceded by a discussion of the patent-medicine business.—Bull. North Dakota Exper. Sta. F. Dept. 1916, v. 4, No. 9, p. 196–242.

Anon.: The United States Supreme Court has decided that the Sherley amendment to the Federal pure food and drug laws is valid.—Public Health Rep. 1916, v. 31, p. 107.

5. DRUG-INSPECTION WORK.

Guigues, P.: An account of the inspection of pharmacies conducted in the days of the ancient Arabs.—Bull. sc. pharmacol. 1916, v. 23, p. 108–118.

Congdon, Leon A.: The 150 drug stores inspected were classified as follows: Good, 39; good to fair, 22; fair, 87; poor, 2.—Bull. Kansas Bd. Health, 1916, v. 12, p. 5.

Adams, F. A.: The lack of uniformity in pharmaceutical preparations is attributed to three causes, namely, lack of consideration in the quality of materials used, in familiarity with the preparation being compounded, and carelessness in manipulation.—Proc. California Pharm. Assoc. 1916, p. 63–65.

Dickman, George C.: A discussion of the results obtained in the examination of a number of drugs for the purpose of showing the necessity for testing all official drugs and chemicals.—Proc. New York Pharm. Assoc. 1916, p. 246–250.

Sayre, L. E.: A report of the results of the examination of a large number of samples of crude drugs. Practically all of the samples were of good quality.—Bull. Kansas Bd. Health, 1916, v. 12, p. 9–15.

Vanderkleed, C. E.: Report of the Committee of the A. Ph. A. on Qualtiy of Medicinal Products.—J. Am. Pharm. Assoc. 1916, v. 5, p. 532–545.

Lea, E. J.: Some of the tablets and capsules examined were found to be short in weight.—Bull. California Bd. Health, 1916, v. 11, p. 421.

Lea, E. J.: The results obtained in the analyses of commercial samples of aspirin and veronal indicate that these drugs are still sold in the adulterated form.—Bull. California Bd. Health, 1916, v. 11, p. 484.

Ekeley, John B.: Of 80 samples of drugs examined, 20 were rejected.—Bull. Colorado Bd. Health, 1916, p. 19.

Street, John Phillips: Results of the examination of drugs from the stocks of dispensing physicians. Of 41 samples of tablets, 8, or 20 per cent, were below standard, while of 12 samples of solutions, 7, or 60 per cent, were below standard.—Rep. Connecticut Agric. Exper. Sta. 1916, part 4, p. 229–248.

Woodward, W. C.: Of 52 samples of drugs examined, 5 were adulterated.—Rep. District of Columbia Health Off. 1916, p. 27.

Barnard, H. E.: Of 407 samples of drugs examined, 41 were rejected because they did not comply with the U. S. P. standards.—Bull. Indiana Bd. Health, 1916, v. 19, p. 2, 15, 39, 52, 63, 76, 88, 100, 112, 125, 136, 184.

Congdon, Leon A.: Of 47 crude and powdered drugs examined, 5 were rejected.—Rep. Kansas Bd. Health, 1916, p. 133.

Lythgoe, Hermann C.: Of a total of 874 drugs examined during the year, 177 were found to be adulterated.—Rep. Massachusetts Bd. Health, 1916, p. 450.

Todd, A. R.: Of 356 samples of drugs examined, 155 were rejected.—Bull. Michigan D. & F. Dept. 1916, No. 248–249, p. 10, 16, 19, 20.

Tice, William G.: Of a total of 503 samples of drugs examined, 141 were below standard.—Rep. New Jersey Dept. Health, 1916, p. 72.

E'we, Geo. E.: Of the 214 samples of crude drugs assayed in the laboratories of the H. K. Mulford Co., 156, or 72.9 per cent, were above the U. S. P. standard.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

Frary, Guy G.: Seventeen of 76 samples of various toilet preparations examined contained methyl alcohol.—Rep. South Dakota F. & D. Com. 1916, No. 16, p. 154–162.

Eskew, Harry L.: Of 181 samples of drugs examined, 67 were rejected.—Rep. Tennessee F. & D. Dept. 1916, p. 16.

Beckers, W.: A report on the results of an examination of capsules of copaiba and sandalwood, respectively, purchased in Germany. An abstract.—C. U. C. P. Alumni J. 1916, v. 23, p. 186.

6. THE PHARMACOPŒIA AS A LEGAL STANDARD.

Beringer, George M.: The present revisions of the Pharmacopœia and the National Formulary are the first editions of these books to appear since they were specifically named in the food and drugs act as standards for the identity and quality of drugs. Hence it may be observed that the U. S. P. IX will be noteworthy for its attempt to satisfy these requirements and for its consequent aim at scientific accuracy.—Am. Druggist, 1916, v. 64, No. 8, p. 23.

Editorial: Druggists should take particular pride in the fact that the two books on which their professionalism is based are standards in every sense of the word and vested with the authority of law. Nothing could more formally fix the status of pharmacy.—Bull. Pharm. 1916, v. 30, p. 263.

Editorial: Since the Pharmacopœia is now a legal standard, it should not be made official until a year after its publication. The fact that there was an interval of only a few months between the appearance of the Pharmacopœia and the date when it became official is characterized as being not only stupid but mean and dishonest.—Critic and Guide, 1916, v. 19, p. 362–363.

Beringer, George M.: A cursory review tracing the evolution of the Pharmacopœia from a book of formulas to that of a book of standards, fulfilling the important function of serving as the legal authority for drugs and safeguarding the entire country against adulteration.—Pennsylvania Med. J. 1916, v. 19, p. 759.

Editorial: We believe that it is necessary for the several State legislatures to take such action as will make the latest editions of the U. S. P. and N. F. official, even though the law in naming the standard might designate a future edition, as it has been held unconstitutional to designate as a standard a publication which does not exist.—Midl. Drug. 1916, v. 50, p. 481.

Editorial: It seems that it will be necessary for Congress to take action before the new Pharmacopœia will be official. Even then, it is doubtful if the book will be official outside of the District of Columbia, the island possessions, the Panama Canal Zone and Alaska, unless ratified by the legislatures of each State.—Pract. Drug. 1916, v. 34, No. 8, p. 18.

7. GENERAL PRINCIPLES TO BE FOLLOWED IN REVISING THE PHARMACOPŒIA.

Beringer, George M.: To revise the Pharmacopœia so that its standards shall properly fulfill the added responsibility of its designation as a legal standard has been the paramount thought of the revisers.—Am. Druggist, 1916, v. 64, No. 8, p. 23.

8. PUBLICATION AND CONTROL.

Anon.: The matter of Federal control of the U. S. P. and N. F. and other pharmaceutical affairs should be of vital concern to the United States authorities, as it has been proven that the drug feature of the food law is constitutional, and that many of the States have been, and are amending their State laws to meet the requirements of the drug end of the national law.—Nat. Drug Clerk, 1916, v. 4, p. 181.

Editorial: In a short discussion of Government revision of the Pharmacopœia, it is stated that until we have a department of public health at Washington, or at least a bureau well organized and equipped to handle the business which would come before such a department, it does not seem likely that the Government will undertake the publication of the Pharmacopœia.—Drug. Circ. 1916, v. 60, p. 530.

Kaiser, W. F.: Report of Wisconsin Pharm. Assoc. Com. on U. S. P. In the discussion, T. H. Potts of the N. A. R. D. says: "We should petition Congress to take entire charge of the revision of the U. S. P. and take it out of the hands of the board of trustees."—Proc. Wisconsin Pharm. Assoc. 1916, p. 40.

Editorial: It is suggested that the U. S. P. be taken over by the American Medical Association and henceforth published by it, since all the publications of this society are gotten out in excellent style, are complete, correct, and up to date.—Critic and Guide, 1916, v. 19, p. 239.

9. THE PHYSICIAN AND THE PHARMACOPŒIA.

Anon.: An editorial review of the U. S. P. IX states that the Pharmacopœia is not a book of standard remedies, but is a book of standards for drugs. Being prepared mainly by pharmacists to meet the need of pharmacists, it contains much matter of little interest to physicians and entirely foreign to scientific medicine.—J. Am. M. Assoc. 1916, v. 67, p. 750–751.

Remington, J. P.: To the medical profession the great value of the Pharmacopœia has been and always will be the standardization of the drugs and preparations in order that the physician may always have preparations of uniform strength upon which he can depend for the treatment of disease.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 136.

Whelpley, H. M.: More medical work in pharmacopœial revision is desirable, and pharmacists should urge physicians to learn more about the Pharmacopœia and give it greater attention in the medical schools.—Western Druggist (The), 1916, v. 38, p. 139.

Scoville, Wilbur L.: The addition of abbreviations to the U. S. P. is obviously intended for the use of physicians, but one wonders how much attention they are likely to pay to it.—Bull. Pharm. 1916, v. 30, p. 279.

Fantus, Bernard: Prescription writing in English. An argument in favor of prescription writing in English illustrated by type prescriptions and variations in the Latin as found in the Pharmacopœia of the United States and in foreign pharmacopœias.—J. Am. M. Assoc. 1916, v. 66, p. 1696–1698.

10. VALUE OF CRITICISM.

Blue, Rupert: As a result of the untiring efforts of the council on pharmacy and chemistry of the American Medical Association for more than a decade, our knowledge of the useful remedies has been increased, the Pharmacopœia improved, and the physicians' armamentarium made more serviceable.—J. Am. M. Assoc. 1916, v. 66, p. 1960.

Thum, John K.: A review of Hygienic Laboratory Bulletin No. 105, in which it is stated that the publication has been of much benefit to those directly interested in the revision of the U. S. P. and N. F. Attention is also called to the remarks of Tschirch in this connection, namely, "That a successful revision is dependent on a complete and perfect review of the literature pertaining to pharmacy and materia medica."—Am. J. Pharm. 1916, v. 88, p. 227–228.

Eberle, E. G.: In a review of the U. S. P. IX and N. F. IV, the author states that the constructive assistance rendered by the Hygienic Laboratory, United States Public Health Service, in compiling the Digest of Comments on the United States Pharmacopœia and the National Formulary was not only very helpful but that the thoroughness and completeness with which the work was done deserves appreciative mention.—J. Am. Pharm. Assoc. 1916, v. 5, p. 797–798.

Anon.: A book review of Hygienic Laboratory Bulletin No. 105 calls attention to its contents as an index of pharmaceutical literature current during the period covered, and states further that the work is particularly interesting at the present time because the manuscripts of the Pharmacopœia and National Formulary are said to be about ready for the press.—Drug. Circ. 1916, v. 60, p. 291.

11. COMMITTEE OF REVISION.

Diekman, Geo. C.: Report of the Committee on Revision of the United States Pharmacopœia.—Proc. New York Pharm. Assoc. 1916, p. 111–115.

Editorial: The U. S. P. committee of revision is composed principally of physicians and pharmacists (retail, wholesale, and manufacturing), but the pharmacists are in the majority and are in control.—J. Am. M. Assoc. 1916, v. 67, p. 750.

Anon.: The National Association of Retail Druggists at its last meeting passed a resolution to take steps to have the association

represented on the next U. S. P. revision committee.—N. A. R. D. J. 1916, v. 22, p. 1349.

12. NATURE AND PROGRESS OF REVISION.

Arny, H. V.: The Digest of Comments on the U. S. P. and N. F., compiled by the Hygienic Laboratory, United States Public Health Service, furnishes all the published criticisms directed against official preparations. These criticisms should be made the basis of a referee's investigation, and, if no criticisms of a certain recipe have been published, that preparation should remain just as it stood in the old Pharmacopœia.—Pract. Drug. 1916, v. 34, No. 9, p. 25.

Whelpley, H. M.: A paper read before the Colorado Pharmaceutical Association describes the method employed in revising the U. S. P. IX.—Drug. Circ. 1916, v. 60, p. 403–405.

Remington, J. P.: A brief review of the changes of a general nature which have been made in the process of revision.—Am. Druggist, 1916, v. 64, No. 7, p. 23–24.

Sayre, L. E.: A paper read before the Kansas Pharmaceutical Association discusses the difficulties experienced in bringing the members of the revision committee to an agreement on questions of both major and minor importance.—Drug. Circ. 1916, v. 60, p. 404.

Remington, J. P.: A discussion of the difficulties met with during the ninth revision of the Pharmacopœia, with special reference to those incident to war-time conditions.—Drug. Circ. 1916, v. 60, p. 695.

Rusby, H. H.: The ninth revision of the United States Pharmacopœia has been conducted under conditions such as have not been realized during any previous revision, conditions as favorable as they were exceptional.—Drug. Circ. 1916, v. 60, p. 534.

Remington, J. P.: The present method of revision, which is unique in pharmacopœial work, will have produced a Pharmacopœia directly revised by a committee of probably a thousand critics instead of the 50 members of the revision committee.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 140.

Beringer, Geo. M.: In a discussion of the Pharmacopœia as a national safeguard against adulteration, it is stated that the system of revision adopted for the U. S. P. is distinctly American, and to its very democracy must be attributed the success that has attended the plan. It is to the honor and credit of American methods that the work has gained the distinction of being designated as "the autocrat of the pharmacopœias."—J. Am. Pharm. Assoc. 1916, v. 5, p. 603–606.

Editorial: The revisers of the Pharmacopœia were six years in doing work which competent and efficient men would do in six months or a year.—Critic and Guide, 1916, v. 19, p. 362.

2. SCOPE.

1. NATURE AND CONTENT OF THE PHARMACOPŒIA.

Editorial: The conservative policy adopted by the U. S. P. Revision committee is to be commended, for while the tendency of the times is for fewer, but better, preparations, still the fact must not be overlooked that the physicians of to-day extensively employ many things which the pharmacologists believe to be of little value.—Northwestern Druggist (The), 1916, v. 17, No. 8, p. 23.

Cohen, S. Solis: Two extreme views were urged upon the committee of revision. One looked upon the Pharmacopœia as a textbook and required it to omit every drug that had not been proved by laboratory experiments to be of therapeutic value. The other extremists desired to include everything that had ever been used as a medicine at any time in the history of mankind by physicians, charlatans, or old women. As a result, the Pharmacopœia is a happy medium representing the consensus of medical and pharmaceutical opinion.—J. Am. Pharm. Assoc. 1916, v. 5, p. 606–607.

Sayre, L. E.: One of the important suggestions as to the scope of the Ninth Revision, as stated by the committee, is contained in the following phrase: "Its function being to prescribe standards of strength and purity, so that the uniform potency of medicinal agents may be secured, therefore, it should contain the active medicinal substances which are extensively used by physicians."—Pharm. Era, 1916, v. 49, p. 307.

Anon.: A book like the Pharmacopœia can not be made to please everybody, but it seems that if an error is to be made, it would be better that the book contained too much rather than too little. That would displease no one except the few cranks who would be satisfied to see only some 20 most important (in their opinion) remedies in it, and who little realize what medicine is for.—N. A. R. D. J. 1916, v. 22, p. 939–942.

Rusby, H. H.: In a detailed review, it is stated that the scope of the Pharmacopœia has been a subject of strong and in some ways of bitter controversy since a period antidating by several years the holding of the last convention. Generally speaking, this controversy has been between the medical and pharmaceutical representatives, and was based upon different views as to the office and function of the book.—Drug. Circ. 1916, v. 60, p. 535.

Kraemer, Henry: The author is of the opinion that it can be safely stated that the present U. S. P. ranks first in the pharmacopœias of the world in the selection of official articles and in the standards and tests that are provided.—Pharm. Era, 1916, v. 49, p. 387.

Sayre, L. E.: The Pharmacopœia is a representative and democratic book and not a bureaucratic publication, arbitrarily setting forth the ideas of a few specialists.—Pharm. Era, 1916, v. 49, p. 307.

Anon.: A review of the U. S. P. IX. It is pointed out that the present work contains 722 articles in the text; 277 tests and volumetric solutions; 315 volumetric, gravimetric, and other assays, and 62 diagnostical reagents. In the U. S. P. VIII there were 958 articles in the text, 155 test and volumetric solutions, 149 volumetric assays, and 35 gravimetric assays. Of the articles in the text of the U. S. P. VIII, 243 have been dismissed, while 67 new ones have been introduced.—Am. J. Pharm. 1916, v. 88, p. 371–373.

Millard, E. J.: A favorable criticism and a detailed review of the U. S. P. IX.—Pharm. J. 1916, v. 97, p. 366–367, 387–388.

Editorial: The U. S. P., although one of the best in the world, suffers from "embarass des richesses." A good deal of the material which it contains is quite superfluous, and its deletion would prove distinctly advantageous to the medical profession, to the pharmaceutical profession, and to the students of medicine and pharmacy.—Critic and Guide, 1916, v. 19, p. 240.

Editorial: A review of the new edition of the U. S. P. concludes with the statement that in the future this volume promises to be a work embodying botanical, chemical, physical, and physiological data, and standards pertaining to American official remedies, rather than a book of pharmacy.—Chem. & Drug. 1916, v. 88, No. 1912, p. 43.

Anon.: A review of the new edition of the U. S. P. states that among the distinctively new features of the work are the provision of standards for vegetable drugs; the introduction of chapters on sterilization, on diagnostical reagents and tests, on biological assays, and of a section giving the microscopical characteristics of powdered drugs. Furthermore, electro-analysis has been introduced for the first time, and the refractive indices of certain substances are given.—Am. Druggist, 1916, v. 64, No. 8, p. 22.

Scoville, Wilbur L.: In a review of the U. S. P., it is stated that the Ninth Revision has reinstated under the simples a list of preparations into which the particular simple enters. It is difficult to see the value of such lists except as an excuse for more examination questions for students, and as an extra burden for the students and registration applicants.—Bull. Pharm. 1916, v. 30, p. 280.

Scoville, Wilbur L.: The appendix to the U. S. P. IX represents the best and most advanced thought of the revision committee and employs the latest established methods in chemical and physical examinations.—Bull. Pharm. 1916, v. 30, p. 279.

Cohen, S. Solis: The scientific work of the U. S. P.—botanic, chemic, pharmaceutic, and biologic—is probably superior to any-

thing done in a book of this kind before.—J. Am. Pharm. Assoc. 1916, v. 5, p. 606–607.

Beringer, George M.: With each revision there has been a marked improvement and a gradual change in the character of the work. The Pharmacopœia has become less and less simply a book of formulas and has become more and more a book of standards prepared with a definite purpose in view.—J. Am. Pharm. Assoc. 1916, v. 5, p. 603–606.

Editorial: On the whole, a fair understanding and use of the U. S. P. IX will involve a much more extended chemical and pharmaceutical training than has any of its predecessors. We feel that much objection to the new U. S. P. will be urged because of the high scientific training required for its intelligent use.—Midl. Drug. 1916, v. 50, p. 349.

Schneider, Albert: The U. S. P. IX is a good piece of the bookmaker's art. The editorial work and proof reading have been well done; two glaring omissions, however, are noted, namely, suitable heads for part one and part two.—Drug. Circ. 1916, v. 60, p. 692.

Asher, Phillip: One important feature that is lacking in the new U. S. P. is a statement of the therapeutic properties of the substances listed therein.—Southern Pharm. J. 1916, v. 9, p. 185.

Editorial: The U. S. P. and N. F. are insufficient as standards and authoritative guides for the pharmacist, not only because they give no reasons for the often peculiar working directions, not only because the information on preservation is so meager that it is practically valueless, not only because these standards are not even found in all pharmacies, but because they continue to recognize the mischievous fluid extract to the utter absolute exclusion of the sanest class of preparations of the vegetable materia medica, namely, the 50 per cent tincture.—N. A. R. D. J. 1916, v. 22, p. 888.

Anon.: It would be a good idea to mark each formula in the new U. S. P. and the new N. F. in which a change has been made with a cross or other suitable mark, so that the compounder may see at a glance, when turning to it, that a change in formula or working directions has been made.—N. A. R. D. J. 1916, v. 23, p. 111.

Millard, E. J.: The index to the U. S. P. IX is most complete, but would have been improved by using a different type for articles in part two.—Pharm. J. 1916, v. 97, p. 388.

Millard, E. J.: As the U. S. P. has always been more inclined to recognize newer remedies than the Ph. Brit., some surprise may be expressed at the absence of adrenalin and its solution, silver proteinate, alkaline formates, iron lactate, acetylsalicylic acid, ichthyol or one of its substitutes, antityphoid serum, acid sodium phosphate, and diethylbarbituric acid.—Pharm. J. 1916, v. 76, p. 366.

Anon.: A book review of the U. S. P. IX states that among the drugs of little or no therapeutic importance or value are musk, arnica, eriodictyon, quassia, pumpkin seed, saw palmetto berries, sarsaparilla, and couch grass. Four of the nine forms of quinine are stated to be superfluous.—J. Am. M. Assoc. 1916, v. 67, p. 764.

Holmes, E. M.: A criticism of the botanical names of the new U. S. P.—Pharm. J. 1916, v. 97, p. 484–485.

Arny, H. V.: A review of the chemistry of the new Pharmacopœia.—Pract. Drug. 1916, v. 34, No. 9, p. 23.

Perry, E. J.: A citicism of the chemistry of the U. S. P. IX.—Chem. & Drug 1916, v. 88, p. 40.

Beringer, G. M.: A paper discussing some of the changes and additions to the U. S. P. IX.—Am. Druggist, 1916, v 64, p. 307.

Diekman, G. C.: A paper discussing some of the changes made in the ninth revision of the U. S. P.—Pharm. Era, 1916, v. 49, p. 305.

Asher, Phillip: A review of the changes made in the ninth revision of the U. S. P.—Southern Pharm. J. 1916. v. 9, p. 152–154, 183–185.

Beringer, George M.: A discussion of some of the changes made in the ninth revision of the U. S. P.—Pharm. Era, 1916, v. 49, p. 305. 1916, v. 34, No. 8, p. 22–24.

Anon.: A brief note calling attention to the *Digest of U. S. P. Changes* published by the H. K. Mulford Co.—Am. J. Pharm. 1916, v. 88, p. 432.

Diekman, G. C.: A paper discussing the new U. S. P. from the standpoint of its pharmacy.—Pract. Drug. 1916, No. 10, p. 23.

2. THE PHARMACOPŒIA AS A TEXTBOOK.

Rusby, H. H.: The appendix of the Pharmacopœia constitutes one of the best texbooks on pharmaceutical subjects in existence. Not only does it contain a number of tables which are indispensable for purpose of reference, but there are explanatory chapters on various subjects, such as thermometers, powders, percolation, etc., which can be studied with the greatest advantage.—Drug. Circ. 1916, v. 60, p. 540.

Scoville, Wilbur L.: The appendix now forms, in itself, an excellent texbook on methods of examination and testing for medical and pharamceutical students, and doubtless will be so used in laboratories and colleges.—Bull. Pharm. 1916, v. 30, p. 279.

Raubenheimer, Otto: While the U. S. P. is not intended primarily as a textbook, the new edition will nevertheless be used to a great extent by students of pharmacy in acquiring their education.—D.-A. Apoth.-Ztg. 1916, v. 37, p. 80.

Eberle, E. G.: A review of the U. S. P. IX states that part 2 should give the book a more extended use in the laboratories of medical and pharmaceutical schools; the inclusion of explanatory

remarks, instruction in the details of manipulations, really adds textbook value to the work.—J. Am. Pharm. Assoc. 1916, v. 5, p. 794–796.

Humphrey, John: A discussion of the British Pharmacopœia in its capacity as an aid to the student of pharmacy.—Pharm. J. 1916, v. 97, p. 835–836.

3. A LIMITED MATERIA MEDICA.

Anon.: An editorial states that the committee of revision of the Pharmacopœia included physicians and pharmacists, but the pharmacists were in the majority and in control. The majority of the representatives of the medical profession on this committee would have preferred to see the bulk of the Pharmacopœia reduced and its value as a work of reference enhanced by the rejection of therapeutically worthless drugs. The representatives of commercial interests, on the other hand, argued that it was necessary for the Pharmacopœia to provide standards for drugs in more or less general use, whether worthless or otherwise.—J. Am. M. Assoc. 1916, v. 67, p. 750.

Editorial: Pharmacists should use their influence with their physicians to hasten the day when our materia medica will be restricted to a smaller number of medicaments. Physicians and pharmacists will both profit when that day arrives.—Northwestern Druggist (The), 1916, v. 17, No. 8, p. 23.

Wilbert, Martin I.: The immediate object of the compilation *A Handbook of Useful Drugs* was to have a selected list of drugs for use in medical schools and as a basis for examinations by State medical examining and licensing boards. The ultimate object was to develop a thorough knowledge regarding the uses and limitations of a few drugs rather than a smattering knowledge of many.—J. Am. M. Assoc. 1916, v. 67, p. 1491–1492.

Anon.: A book review of a volume entitled *A Handbook of Useful Drugs* states that the object of this publication is to present a materia medica that should be sufficiently extensive to include the drugs worth while, yet not so extensive that the average practitioner can not obtain a fair knowledge of them; also to continue the movement for a restricted and more practical materia medica.—Pract. Drug. 1916, v. 34, No. 1, p. 17.

Anon.: Prescription writing. A general discussion with a review of useless drugs and comments on hospital mixtures.—J. Am. M. Assoc. 1916, v. 66, p. 1093–1094.

4. NOMENCLATURE.

Raubenheimer, Otto: In a review of the new edition of the U. S. P., it is stated that the nomenclature is strictly up to date; especially is this true of the chemicals.—D.-A. Apoth.-Ztg. 1916, v. 37, p. 79.

Editorial: Although J. B. Moore published a plea in the Druggists Circular in 1882 for the indication of the pronunciation of titles in the U. S. P., no diacritical marks have appeared in this work to date.—Drug. Circ. 1916, v. 60, p. 4.

Diekman, George C.: The extension of the use of synonyms, as in the U. S. P. IX., will be welcomed by the pharmacist, and it is believed that such extension might have been given a still wider scope with profit.—Pract. Drug. 1916, v. 34, No. 10, p. 23.

Asher, Phillip: It is not understood why synonyms have not been included under phenyl cinchoninic acid and a number of the other new compounds introduced into the Pharmacopœia.—Southern Pharm. J. 1916, v. 9, p. 185.

Holmes, E. M.: The botanical nomenclature, as followed by the revisers of the U. S. P., ignores the generally acknowledged fact that there are no rules without exceptions, although this fact was recognized by Linnæus, the author of the binomial nomenclature, when he adapted such trinomial names as *Adiantum Capillus-Veneris* and *Arctostaphlos Uva-Ursi*.—Pharm. J. 1916, v. 97, p. 484.

Schneider, Albert: A short criticism of the terminology employed by the U. S. P. in describing various plant tissues and tissue elements.—Drug. Circ. 1916, v. 60, p. 692–693.

Anon.: In the ninth revised edition of the U. S. P. official abbreviations for the Latin titles will be included. This will tend to facilitate prescription writing and will do away with the confusion resulting from nonuniformity in the use of abbreviations.—J. Am. M. Assoc. 1916, v. 66, p. 1094.

Editorial: In commenting on the introduction of abbreviations into the new edition of the U. S. P., attention is called to the fatalities resulting from a misunderstanding of the abbreviation for barium sulphate, and the hope is expressed that prescribers will pay more attention to this feature than they ordinarily do to suggestions contained in the Pharmacopœia.—Am. Druggist, 1916, v. 64, No. 8, p. 22.

Scoville, Wilbur L.: The U. S. P. IX has taken the first step in simplifying the nomenclature of the alkaloidal salts and has made it quite proper to refer to "quinine bromide," "emetine chloride," etc.—Bull. Pharm. 1916, v. 30, p. 365.

Scoville, Wilbur L.: "Aloes" and "cantharides" are the only plural names for drugs in the U. S. P. IX. Even the familiar "cloves" is now "clove," in keeping with most of the nomenclature.—Bull. Pharm. 1916, v. 30, p. 362.

Rusby, H. H.: The fanciful name "cascara sagrada" has been substituted as the Latin title for "rhamnus purshiana," which latter is as pure Latin as the former is Spanish.—Drug. Circ. 1916, v. 60, p. 537.

Anon.: The term "cubic centimeter" is so well established and so widely used wherever the metric system is employed that it can not be expected that it will be universally displaced by the word "mil." The latter is therefore only a superfluous synonym, and as such is out of harmony with the simplicity of the metric system. Perhaps it may even be taken for the abbreviation of "millimeter," "milligram," or other words, derived from "mille," which would be equally entitled to the same abbreviation.—J. Am. Med. Assoc. 1916, v. 67, p. 764.

Anon.: An editorial pointing out the extent of the practice of introducing different proprietary names for the same substance. Special mention is made of hexamethylenamine and acetylsalicylic acid.—Brit. M. J. 1916, v. 1, p. 532.

Fantus, Bernard: A discussion of the advisability of the use of English in the writing of prescriptions.—J. Am. M. Assoc. 1916, v. 66, p. 1696–1699.

Fantus, Bernard: A table giving some of the official Latin names in the Pharmacopœia of the United States and in foreign pharmacopœias.—J. Am. M. Assoc. 1916, v. 66, p. 1697.

Anon.: A book review calls attention to the seventh edition of *Gould's Pocket Medical Dictionary*. It is stated that the present edition contains 35,000 words, whereas the fourth edition dated 1900 contained definitions of only 30,000 words.—Brit. M. J. 1916, v. 1, p. 822.

Anon.: A book review calls attention to the third edition of *The Chemists's Dictionary of Medical Terms*. The work is published by the Chemist and Druggist of London.—Pharm. J. 1916, v. 97, p. 64.

W. P. J.: A review of a volume by A. C. Huysse on Dutch official names and synonyms and folk names for the important drugs of commerce.—Chem. Weekblad. 1916, v. 13, p. 135–136.

W. C. De G.: A review of *Pharmaceutische gids voor chemicaliën, drogerijen en geneesmiddelen*, by P. C. De Leeuw, states that the volume is a dictionary containing the Dutch, Latin, and English names of the common drugs, chemicals, and medicinal preparations in use in Holland.—Chem. Weekblad, 1916, v. 13, p. 772.

Pedler, Alexander: A book review calling attention to a volume by C. M. Gupta entitled *Vocabulary of Indian Medicinal Substances and Drugs*.—Analyst (The), 1916, v. 41, p. 326.

5. PUBLICITY.

Editorial: Under the operation of a resolution adopted by the pharmacopœial convention requiring publicity on all proposed changes, the new volume comes before the drug trade and the medical profession with less of a shock than the apperance of a new edition has hitherto produced.—Am. Druggist, 1916, v. 64, No. 8, p. 22.

Remington, J. P.: The greatest delay in the issue of the Pharmacopœia has been caused by the publicity given to the standards, for although the announcement was made in the Journal of the American Pharmaceutical Association that there was a limit of two months or one month in which to send in comments and criticisms the latter have continued to come in slowly, and this will probably continue for two or three years.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 139.

Anon.: The U. S. P. IX is out at last and will become official on September 1: rather a short time for manufacturers, as well as retailers, to set their houses in order, but sufficient, perhaps, as the changes, deletions, and additions have been published in the drug and medical journals.—Western Druggist (The), 1916, v. 38, p. 195.

6. TIME OF PUBLICATION.

Anon.: The chairman of the revision committee is credited with the statement that the new U. S. P. has been declared official from September 1, 1916, and that the book will be issued early in July.—Bull. Pharm. 1916, v. 30, p. 260.

Anon.: The Ninth Decennial Revision of the U. S. P. became official on September 1, but so far only a limited number of copies have been distributed. The committee of revision which fixed the date could not have been properly advised as to conditions in the publishing world or they would not have given the trade so short a time to get their products in line with the new standard.—Drug Topics, 1916, v. 31, No. 9, p. 5.

Editorial: The next decennial convention will meet in May, 1920, less than four years from the date of the publication of the Ninth Revision. Surely it will be possible to organize the work in advance in such a way as to insure the appearance of the Tenth Revision within six years of the date of the adjournment of the convention which authorized it.—Am. Druggist, 1916, v. 64, No. 8, p. 22.

Editorial: In a review of the more general changes in the new edition of the U. S. P., it is stated that the book did not appear until several days after it had become official.—Apothecary, 1916, v. 13, No. 9, p. 15.

Anon.: It is suggested that the publication of the Ninth Revision of the U. S. P. be delayed until 1920, and that the volume then be known as the IX-X revision. This would give the pharmacopœial revision committee a chance to catch up and remain up to date. It would also save millions of dollars for the drug and pharmaceutical trade.—National Drug Clerk, 1916, v. 4, p. 116–117.

Editorial: The date set for the publication of the Pharmacopœia has been changed so often that some time will be necessary to acquaint the pharmacists of the United States with the fact that the work is now ready for distribution.—Pract. Drug. 1916, v. 34, No. 4, p. 18.

7. DOSES.

Rusby, H. H.: The doses of the new U. S. P. remain the average doses as heretofore, the committee having very wisely refused to assume responsibility for stating what is the maximum dose and having taken great pains to indicate in the preface that they disclaimed such responsibility.—Drug. Circ. 1916, v. 60, p. 538.

Sayre, L. E.: If the revision committee should have been instructed to insert in the appendix a table of maximum single doses of the toxic and most potent of the official drugs, it would have served a double purpose. It would have been a valuable text for instructors in medical colleges and would have been a protection to the dispenser and administrator of medicines, warning them that beyond such a dose there would be a great risk.—Pharm. Era, 1916, v. 49, p. 356.

8. ANTIDOTES.

Beach, Samuel C.: General and specific descriptions of procedures for the emergency treatment of poisoning.—Am. J. Clin. Med. 1916, v. 23, p. 337–340, 429–431, 504–506.

Anon.: An article credits the Eclectic Medical Journal with pointing out the value of boiled starch as an antidote for iodine poisoning.—Nat. Druggist, 1916, v. 46, p. 18.

Fantus, Bernard: An experimental study of antidotes in mercuric chloride poisoning.—J. Lab. & Clin. Med. 1916, v. 1, p. 879–894.

Anon.: In a reference to the use of calcium sulphide as an antidote for mercuric chloride poisoning, it is stated that J. H. Wilkins, of Cincinnati, Ohio, was able to save the lives of animals when treatment was begun as late as 48 hours after the poison had been administered.—Canadian Pharm. J. 1916, v. 29, p. 436.

Anon.: A discussion on the value of sodium sulphate as an antidote for phenol (carbolic acid) poisoning.—J. Am. M. Assoc. 1916, v. 67, p. 535.

Anon.: Before a gathering of doctors at Colombo, Ceylon, Mr. Donald Obeysekere apparently demonstrated the efficacy of plantain juice as an antidote of the bite of the cobra.—Mulford's Vet. Bull. 1916, v. 8, p. 34.

9. WEIGHTS AND MEASURES.

Editorial: The use of the metric system alone in the manufacture of pharmaceutical preparations is urged upon all pharmacists, as the forthcoming N. F. will give its formulas in this system.—Apothecary, 1916, v. 13, No. 7, p. 13.

Editorial: The term "mil" was first used by the Pharmaceutical Society of Great Britain about a dozen years ago, when that society took action to have the word adopted.—Drug. Circ. 1916, v. 60, p. 391.

Diekman, George C.: One of the reasons for the introduction of the term "mil" into the U. S. P. is that the United States Bureau of Standards declared the words "cubic centimeter" and its abbreviation cc. to be a misnomer. Another reason is that there is a slight difference between the cubic centimeter and mil. Still another is that the words "cubic centimeter" destroy the harmony of the metric terms. To many none of the reasons seem sufficient to warrant so radical a change.—Pract. Drug. 1916, v. 34, No. 10, p. 23.

Editorial: We have actively opposed the introduction of the word "mil," although logically correct, for the reason that all of the literature of chemistry for the past century is based upon the use of the term "cubic centimeter," and the purely theoretical considerations in favor of the former appear to outweigh the practical objections to its introduction.—Am. Druggist, 1916, v. 64, No. 8, p. 22.

Anon.: The term "cubic centimeter" is so well established and so widely used, wherever the metric system is employed, that it can not be expected that it will be universally displaced by the word "mil." The latter is therefore only a superfluous synonym, and as such is out of harmony with the simplicity of the metric system. Perhaps it may even be taken for the abbreviation of "millimeter," "milligram," or other words derived from "mille," which would be equally entitled to the same abbreviation.—J. Am. M. Assoc. 1916, v. 67, p. 764.

Editorial: The expression "mil" is not only useless but it may lead to confusion. Particularly are we afraid that it may be taken for an abbreviation of milligram.—Critic and Guide, 1916, v. 19, p. 365.

Schneider, Albert: The universally recognized unit for making microscopic measurements is the 0.001 part of a millimeter, designated as "micron" and indicated by the Greek letter μ (mu). In the U. S. P., the millimeter is given as the micrometric unit and the measurements are given in millimeters and fractions thereof. No explanation is offered showing why this unit was adopted in preference to the micron.—Drug Circ. 1916, v. 60, p. 692.

Anon.: The omission of the apothecaries' quantities from the formulas of the new N. F. is likely to meet some adverse criticism. Changes in habit come slowly. The method employed in the N. F. III was of course a mistake, for the reason that the metric and apothecaries formulas there given were not equivalent, and confusion resulted.—N. A. R. D. J. 1916, v. 22, p. 939.

Watson, Charles N.: An article dealing with the origin of English measures of length.—Nature, 1916, v. 96, p. 69–72.

Dietel, Herman: A discussion of the Harrison law with respect to its effect on the adoption of the metric system.—Rocky Mountain (The), Denver, 1916, v. 30, No. 9, p. 22–26.

Anon: Consul General E. D. Winslow, at Copenhagen, Denmark, reports that, beginning April 1, 1916, the metric system became official in Denmark.—Northwestern Druggist (The), 1916, v. 17, No. 6, p. 34.

England, J. W.: A short discourse on how to use the metric system.—J. Am. Pharm. Assoc. 1916, v. 5, p. 723–726; see also Apothecary, 1916, v. 13, No. 7, p. 15–16.

Heller, Charles T.: A short paper explaining how to convert metric into apothecaries' measures.—Northwestern Druggist (The), 1916, v. 17, No. 2, p. 42.

O'Connor, D. Chas.: Exercises in the use of the metric system for the pharmacist.—Spatula (The), 1916, v. 23, p. 57–61.

Andrews, H. M.: Rules for converting the imperial dose into the corresponding metric one.—Pharm. J. 1916, v. 96, p. 182.

Doerschuk, A. N.: A discussion of the advantages and disadvantages of the metric system in prescribing.—Proc. Missouri Pharm. Assoc. 1916, p. 89–92.

Rae, W. N., and Reilly, J.: An essay dealing with precision in chemical weighing in a very complete and systematic manner.—Chem. News, 1916, v. 114, p. 187–189, 200–203.

Stratton, S. W.: Specifications and tolerances for weights and measures and weighing and measuring devices.—Circ. Bur. Stand. 1916, No. 61, p. 1–44.

Anon.: A reprint of Wisconsin tolerances and specifications for glass graduates prescribed by George J. Weigle, *ex officio* State Superintendent of Weights and Measures.—National Drug Clerk, 1916, v. 4, p. 554.

Anon.: Inspector Cohn, of the Indiana State Board of Health, reports that only 441 of 871 balances inspected were in good order, 340 were in fair condition, and 90 were condemned. Out of 10,921 weights tested, 659 were accurate, 6,335 were light, 1,990 were heavy, and 1,828 were condemned because they were either too light or too heavy to be longer used.—Pharm. Era, 1916, v. 49, p. 222.

Anon.: John F. Farrell, superintendent of weights and measures of New York State, reports that many of the weights used by druggists are of the variety known as "coin weights," being in the shape of the nickel five-cent piece. These weights take up a great amount of dirt and are not of the type which should be used. They are, therefore, being condemned wherever found.—Oil, Paint & Drug Rep. 1916, v. 90, No. 22, p. 57.

Weigle, George J.: The inspection of weights and measures in Wisconsin during the year 1915 showed that 34.2 per cent of the pre-

scription weights and 26.3 per cent of the glass graduates examined were inaccurate.—Proc. Wisconsin Pharm. Assoc. 1916, p. 63–65.

Anon.: The National Association of Retail Druggists at its last convention passed a resolution recommending the adoption by the United States Government of a method that will prevent the interstate shipment of measuring and weighing devices that do not meet the requirements of the United States Bureau of Standards.—N. A. R. D. J. 1916, v. 22, p. 1352.

Donald, R.: Supplemental notes on a method of drop-measuring liquids and suspensions.—Lancet, 1916, v. 191, p. 423–429.

10. OBJECTS AND USES.

Lascoff, J. Leon: The Pharmacopœia is a book of standards for such substances as are sufficiently used as remedial agents to warrant recognition and the fixing of proper standards. It is not considered as an authority on therapeutics, and the admission or deletion of any article is not to be considered as an indication of its therapeutic value.—Pract. Drug. 1916, v. 34, No. 1, p. 24.

Editorial: To the retail pharmacist, the U. S. P. IX is without question the most complete and valuable Pharmacopœia that has ever been issued. Every pharmacist should have a copy of this book, for it contains more condensed facts and valuable information than any of the various textbooks, although the latter are essential for extended articles on specific subjects.—Northwestern Druggist (The), 1916, No. 8, p. 24.

Editorial: The force of the argument that the Pharmacopœia is necessary as a standard for drugs is somewhat impaired by the fact that the National Formulary, which has also been made a book of legal standards, now includes individual drugs as well as combinations; the new edition of the Formulary, in fact, contains a large number of drugs which were dropped from the U. S. P. VIII.—J. Am. M. Assoc. 1916, v. 67, p. 750–751.

Sigel, Irving S.: I have been employed in drug stores where the U. S. P. and N. F. were as rare as a team of horses on an elevated road. The proprietors of these stores kept secret formulary books which were captioned "M. O. P.," meaning "My own pharmacopœia."—National Drug Clerk, 1917, v. 5, p. 168.

Beringer, G. M.: A paper discussing the Pharmacopœia in the light of its acting as a safeguard against adulteration.—J. Am. Pharm. Assoc. 1916, v. 5, p. 603.

Arny, H. V.: A paper discussing the relation of the U. S. P. IX to the newer pharmacy, points out that the book will be of use only to such pharmacists who are trained to perform high-grade chemical and microscopical work.—J. Am. Pharm. Assoc. 1916, v. 5, p. 989.

Kilmer, F. B.: A paper calling attention to the possibility of druggists selling copies of the Pharmacopœia to physicians, hospitals, libraries, municipal laboratories, etc.—Pract. Drug. 1916, No. 8, p. 24.

11. ADDITIONS AND DELETIONS.

Anon.: A book review of the new edition of the U. S. P. states that the work contains 1,436 articles as compared with a total of 1,147 in the Eighth Revision. Two hundred and forty-three articles formerly official have been dismissed and 67 new articles have been introduced. A list of the articles added is appended.—Am. Druggist, 1916, v. 64, No. 8, p. 22.

Sayre, L. E.: A discussion pointing out the difficulties experienced by the subcommittee on scope, with respect to additions and deletions.—Pharm. Era, 1916, v. 49, p. 306, 355.

Rusby, H. H.: A very important addition to the text of the U. S. P., now made for the first time, is the introduction of official abbreviations of the titles. Its adoption at the present time is undoubtedly one of the indirect results of the food and drug statute.—Drug. Circ. 1916, v. 60, p. 537.

Editorial: The most striking general addition to the Pharmacopœia is that of official abbreviations. They will relieve the pharmacist of much responsibility in this respect providing he does not misinterpret them.—Apothecary, 1916, v. 13, No. 9, p. 15.

Anon.: The principle of making use the sole criterion for admission to the Pharmacopœia has not been strictly observed. Good results from the efforts of the medical contingent are to be observed here and there, as in the deletion of elixir of the phosphates of iron, quinine, and strychnine, and of the emulsion of cod liver oil with hypophosphites.—J. Am. M. Assoc. 1916, v. 67, p. 751.

Scoville, Wilbur L.: A significant fact about the 67 additions to the U. S. P. IX is that approximately a quarter of their number pertain to hypodermic medication.—Bull. Pharm. 1916, v. 30, p. 365.

Beringer, George M.: The preparations added in the revision of the Pharmacopœia have not been very numerous, the tendency being to leave to the National Formulary the providing of formulas for preparations.—Am. Druggist, 1916, v. 64, No. 8, p. 24.

Raubenheimer, Otto: In an enumeration of the 15 new galenicals added to the U. S. P., the author states that the addition is highly commendable from a pharmaceutical point of view. Hope is also expressed to the effect that physicians will frequently prescribe them, since the subcommittee on scope, which is responsible for these additions, consists principally of the medical profession.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1335–1339.

Scoville, Wilbur L.: In the U. S. P. IX, under the simples, a list of preparations into which the particular simple enters is again given. It is difficult to see the value of such lists except as an excuse for more examination questions for students and registration applicants.—Bull. Pharm. 1916, v. 30, p. 280.

Rusby, H. H.: In some cases deletions have been made for the sole purpose of dodging difficult questions, the very ones for which pharmacopœias are chiefly needed. The deletion of whisky and brandy and of viburnum opulus are examples of this kind.—Drug. Circ. 1916, v. 60, p. 536.

12. PURITY AND STRENGTH.

Diekman, George C.: The purity rubric was introduced into the U. S. P. VIII and has been retained in the U. S. P. IX. The figures given in the U. S. P. IX represent requirements that can be reasonably demanded and met in each instance.—Pract. Drug. 1916, v. 34, No. 10, p. 23.

Kraemer, Henry: The purity rubric, which was introduced in the U. S. P. VIII in connection with the definitions of chemical substances, was extended in the Ninth Revision to vegetable and animal drugs. That this rubric is essential will be apparent to anyone who is familiar with the quality of drugs as seen in commerce. It is a very great step forward and will restore the lost art of the garbling of drugs by pharmacists and direct greater attention to their quality and purity.—Pharm. Era, 1916, v. 49, p. 387.

Scoville, Wilbur L.: The purity rubric is now a maximum minimum affair. The real standard is the mean between the two and this will doubtless be honored in all cases.—Bull. Pharm. 1916, v. 30, p. 280.

Scoville, Wilbur L.: A "purity rubric" adopted for most of the vegetable drugs in the Pharmacopœia is a statement which limits the amount of stems and "other foreign matter" which can be allowed, and also places a limit on the yield of ash.—Bull. Pharm. 1916, v. 30, p. 362–363.

Scoville, Wilbur L.: Since the new Pharmacopœia states maximum as well as minimum strengths, the fact that a preparation is stronger than that officially recognized does not mean that it conforms to the law. It must be within the limits established by the U. S. P. or it is liable to seizure for being adulterated and the owner is liable to a fine.—Bull. Pharm. 1916, v. 30, p. 322.

Beringer, George M.: The principle of allowing for the proper variability of chemicals and for the natural variation in crude drugs has led to many modifications of the rubric requirements by which, instead of the fixed purity statements of the previous Revision, there now appears in most of the monographs a variability allowance in

accordance with determined conditions, and the limitations of such variability are officially defined.—Am. Druggist, 1916, v. 64, No. 8, p. 23.

Anon.: One of the principal features of the U. S. P. IX is the introduction of definite limits of purity, in place of the old "about" or "not less than." This will be a big help to manufacturers and dealers who have been more or less harassed in the past by officials of meticulous minds, who made no allowance for experimental or personal error in reporting results.—Drug Topics, 1916, No. 9, p. 8.

Beringer, George M.: The changes that have been made in the strength of the chemical products of the U. S. P. are, for the most part, such as were required by the commercial conditions and the quality of the products commonly dispensed as medicines.—Am. Druggist, 1916, v. 64, No. 8, p. 23.

Hilton, S. L.: The alcoholic strength of many of the N. F. preparations has been reduced for the purpose of eliminating the possibility of their being used as beverages.—Bull. Pharm. 1916, v. 30, p. 281.

Hilton, S. L.: The narcotic drug content of a number of the N. F. preparations has been reduced in order to comply with the exceptions of section 6 of the Harrison law.—Bull. Pharm. 1916, v. 30, p. 281.

Anon.: In a discussion of standards for purity and strength, it is urged that the official standard names only should be used in connection with official standard products, and that below-standard and above-standard preparations should be recognized under other names and designations.—N. A. R. D. J. 1916, v. 22, p. 670–671.

Sayre, L. E.: An enumeration of the new standards of the U. S. P. IX.—Am. Food J. 1916, v. 11, p. 456–457.

Beringer, George M.: A detailed discussion of what the new U. S. P. standards for whisky and brandy should be.—Am. J. Pharm. 1916, v. 88, p. 49–65.

Anon.: The National Association of Retail Druggists at their last convention passed a resolution favoring an official standard for whisky and brandy in order that inferior articles for medicinal purposes may be avoided.—N. A. R. D. J. 1916, v. 22, p. 1351

13. ATOMIC WEIGHTS.

Scoville, Wilbur L.: The atomic weights of the U. S. P. are now based upon oxygen=16 instead of hydrogen=1, which eliminates many of the fractions in calculations, and brings the work into harmony with chemical usage throughout the world.—Bull. Pharm. 1916, v. 30, p. 279.

Clark, F. W.: Annual report of the International Committee on Atomic Weights, 1917.—J. Am. Chem. Soc. 1916, v. 38, p. 2219–2221.

Baxter, Gregory P.: Twenty-third annual report of the Committee on Atomic Weights. Determinations published during 1915.—J. Am. Chem. Soc. 1916, v. 38, p. 489–496.

Anon.: A table of international atomic weights for 1916 reprinted from the Annual Report of the International Committee on Atomic Weights.—Drug. Circ. 1916, v. 60, p. 11.

Guye, Ph. A.: A criticism of the International Atomic Weights Committee for its apparent lack of complete and definite methods for revising atomic weights. Criteria for justifying atomic weight changes are also suggested.—J. chim. phys. 1916, v. 14, p. 449–461.

Editorial: The new table of atomic weights recently published by the International Committee on Atomic Weights necessitates a complete revision of the figures and factors which are to be used in the new Pharmacopœia.—Pacific Pharm. 1916, v. 9, p. 257.

Fajans, K., and Lemberg, M.: A description of a method for relative atomic weight determination.—Chem. Zentralbl. 1916, v. 2, p. 214.

Bilecki, A.: An article describing a fundamental unit to be used in the building up of the atomic weights of the elements. The unit is given as 0.307692307.—Ztschr. anorg. Chem. 1916, v. 98, p. 86–96.

Hardin, W. L.: An address outlining the historical development of the present ideas of the structure of the atom, with references to the original works.—Science, 1916, v. 44, p. 655–664.

Clay, J.: A review dealing with the structure of the atom.—Chem. Weekblad, 1916, v. 13, p. 1078–1103.

van der Brock, A.: A note on the relation of atomic weights to radioactive constants.—Nature, 1916, v. 96, p. 677.

Moles, E.: The new values of the atomic weights of carbon and sulphur as announced by the International Committee on Atomic Weights are stated to be founded upon an error of calculation.—J. chim. phys. 1916, v. 15, p. 51–59; see also P. A. Guye, ibid., p: 60–63.

de Coninck, Oechsner, and Gérard: From determinations using the chloride, the atomic weight of bismuth was found to be 208.5.—Compt. rend. Acad. sc. 1916, v. 162, p. 252.

3. NONPHARMACOPŒIAL STANDARDS.

1. NATIONAL FORMULARY.

Anon.: The Committee on Publication of the American Pharmaceutical Association makes the announcement that the National Formularly, fourth edition, will be ready for distribution about July 1, 1916.—Western Druggist (The), 1916, v. 38, p. 136.

Cook, E. F.: A brief history of the fourth edition of the N. F., with a detailed discussion of the preparations contained therein.—Drug. Circ. 1916, v. 60, p. 541.

Hilton, S. L.: A general review of some of the changes made in the National Formulary.—Bull. Pharm. 1916, v. 30, p. 280–281.

Anon.: A review of the fourth edition of the National Formulary states that 183 formulas have been dropped and 201 have been added, making a total of 601 titles in Part 1. Of these, 589 are formulas. Part 2 contains 188 articles, most of which were contained in former editions of the U. S. P.—Am. Druggist, 1916, v. 64, No. 8, p. 21.

Scoville, Wilbur L.: This is the first issue of the National Formulary to state exact standards or to require assays, and some pharmacists may be slow to realize that new legal standards are established by it.—Bull. Pharm. 1916, v. 30, p. 324.

Anon.: A book review states that despite its long and honorable history and useful career, the National Formulary is not as generally familiar to the members of the medical profession as it should be. To many of them it is but a name and is thought of as a mere collection of formulas for skin lotions, shoe blacking, and imitation proprietaries of interest only to druggists.—Am. J. Clin. Med. 1916, v. 23, p. 961.

Editorial: The National Formulary shows, perhaps, the most radical changes over its predecessor in bringing its nomenclature, formulas, and descriptions into agreement with the general style and method of the Pharmacopœia.—Apothecary, 1916, v. 13, No. 9, p. 15.

Scoville, Wilbur L.: In a review of the N. F., IV, the author states that the Pharmacopœia is controlled by the "regular" school of medicine, but that the National Formulary makes no distinction between allopaths, homeopaths, osteopaths, chiropractors, or any other school of practice. Its mission is to perfect or select the pharmaceutical qualities of the formulas, and to allow the physicians as a whole to adjust or judge the therapeutics.—J. Am. Pharm. Assoc. 1916, v. 5, p. 804–807.

Editorial: In a discussion of the therapeutics of the N. F., IV, it is stated that the volume does not meet the approval of the American Medical Association.—J. Am. M. Assoc. 1916, v. 67, p. 764.

Scoville, Wilbur L.: A review of the changes in the N. F., IV.—Western Druggist (The), 1916, v. 38, p. 231–232.

Apple, F. N.: It is recommended that an epitome of the National Formularly be prepared and distributed among pharmacists and physicians in order to increase the sale of the book.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1226.

2. RECIPE BOOK.

Wilbert, M. I.: A paper dealing with the history, scope, and possibilities of the recipe book of the American Pharmaceutical Association. A bibliography of the recipes published in the Journal of

the A. Ph. A. from 1912 to date is given.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1121.

Anon.: A symposium of comments on the nature and scope of the recipe book.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1213–1216.

Raubenheimer, Otto: The author announces the receipt of a book entitled *Sammlung von Vorschriften für Zubereitungen zum Ersatz von Specialitaten des Feindlichen Auslandes* and points out its possible value in the compilation of formulas for the A. Ph. A. Recipe Book.—Pacific Pharm. 1916, v. 9, p. 270–271.

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Anon.: A list of a number of formulas proposed for the A. Ph. A. recipe book.—Bull. Pharm. 1916, v. 30, p. 255.

Anon.: A compilation of formulas for preparing a variety of articles, both medicinal and nonmedicinal.—Canadian Pharm. J. 1916, v. 49, p. 36, 76, 116, 141, 232, 280, 328, 424; v. 50, p. 34, 74, 154, 202.

Anon.: A list of popular formulas for a variety of preparations.—Am. Druggist, 1916, v. 64, No. 12, p. 28–29, 32, 37–38.

Porterfield, W. P.: A number of formulas for masking the disagreeable taste of certain substances, for suspending solids in liquids, etc.—Proc. North Dakota Pharm. Assoc. 1915, p. 51–58.

Groat, H. S.: A presentation of a number of formulas for the manufacture of toilet preparations, including casein creams, cold creams and toilet lotions.—J. Am. Pharm. Assoc. 1916, v. 5, p. 150–156.

Reimers, M. N.: Formulas for the preparation of "Pulvis fluens Hydrargyri" and other mixtures are presented.—Apoth.-Ztg. 1916, v. 31, p. 16.

3. NEW AND NONOFFICIAL REMEDIES.

Anon.: The rules of the council on pharmacy and chemistry of the American Medical Association for admission to *New and Nonofficial Remedies* require that the composition of a remedy be nonsecret, that its uniformity be safeguarded, that no false claims be made regarding its therapeutic properties, and that its use shall be based on at least a probability of therapeutic merit.—J. Am. M. Assoc. 1916, v. 66, p. 913.

Anon.: A list of new remedies accepted by the council on pharmacy and chemistry of the American Medical Association for admission to *New and Nonofficial Remedies*.—Cleveland M. J. 1916, p. 135–199, 291, 365, 427, 497, 537, 620, 678, 737, 814.

Anon.: A book review of *New and Nonofficial Remedies* states that the volume is primarily intended for the physician, but that no

pharmacist who wishes trustworthy information relating to the newer remedies, proprietary or nonproprietary, should be without it.—Pharm. Era, 1916, v. 49, p. 211.

Anon.: A review of *New and Nonofficial Remedies*, 1916, states that the book is a sort of dispensatory of new and nonofficial remedies, and as such will be found of great service to pharmacists as well as physicians.—Drug. Circ. 1916, v. 60, p. 291.

Thum, John K.: A book review of *New and Nonofficial Remedies* published by the American Medical Association. Special mention is made of the chapters on digitalis-principles, arsenic compounds, serums, and vaccines, and digestive ferments.—Am. J. Pharm. 1916, v. 88, p. 227.

SYNTHETICS.

Anon.: A list of new synthetic remedies, with descriptions of the methods by which they may be prepared, their properties, etc.—Bull. sc. pharmacol. 1916, v. 23, p. 47–49.

Marotta, Domencio: On the methods of preparation and properties of a number of the new synthetic remedies.—Boll.. chim-farm. 1916, v. 55, p. 65–69, 97–104.

Schrauth, W.: A discussion of the use of fats in the preparation of synthetic remedies.—Seifensieder Ztg. 1916, v. 36, p. 217–221 through Chem. Abstr. 1916, v. 102, p. 1905.

Childs, W. H.: The coal-tar products family tree and some of its branches.—Oil, Paint & Drug Rep. 1916, v. 90, p. 40–41; see also Chem. Abstr. 1916, v. 10, p. 2140.

Carr, Francis H.: Some aspects of the future of the synthetic chemical industry of Great Britain.—Pharm. J. 1916, v 97, p. 275–276.

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Arny, H. V.: A copy of the report of the Committee on New Remedies of the New York Pharmaceutical Association, consisting principally of a list of such preparations.—Proc. New York Pharm. Assoc. 1916, p. 211–245.

Anon.: A list of new remedies with proprietary names is given.—Am. Druggist, 1916, v. 64, No. 1, p. 27–28; No. 2, p. 31–32; No. 3, p. 31–32; No. 4, p. 32, 37; No. 6, p. 29–30; No. 7, p. 31; No. 8, p. 37; No. 10, p. 30–31; No 12, p. 32.

Anon.: A list of recently introduced new remedies, with a description of their nature and composition.—Südd. Apoth.-Ztg. 1916, v. 56, p. 18, 36, 54–55.

Rabow, S.: A review of the therapeutic novelties made known in 1915, including the specialties and proprietary remedies.—Chem. Ztg. 1916, v. 40, p. 145–147, 167–169, 183–185; see also Chem. Abstr. 1916, v. 10, p. 1253.

Mentzel, H.: Notes on the composition of a number of new remedies introduced during the years 1915 and 1916.—Pharm. Zentralh. 1916, v. 57, p. 5–7, 54–55, 70, 92, 112, 132, 154, 170.

Anon.: On the composition and properties of a number of new proprietary remedies.—Apoth.-Ztg. 1916, v. 31, p. 15, 34, 42, 56, 67, 68, 79, 95, 115.

Düsterbehn: Data relating to the composition and properties of a number of recently introduced remedies.—Chem. Zentralbl. 1916, v. 87, part 2, p. 417–418 from Pharm.-Ztg. 1916, v. 61, p. 246, 286, 293, 313, 379, 404, 419, 440, 450.

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Messner, J.: A quarterly report on new remedies. A review of the literature with a biography.—Ztschr. angew. Chem. 1916, v. 29, p. 257–261, 319–323, 401–402, 408–409; see also C. Mannich, p. 285–288.

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Anon.: A book review calls attention to a volume by C. Bachem on German substitutes for foreign pharmaceutical specialties.—Chem.-Ztg. 1916, v. 10, p. 611.

PATENTS AND TRADE-MARKS.

Stewart, F. E.: Report of the A. Ph. A. Commitee on Patents and Trade-Marks.—J. Am. Pharm. Assoc. 1916, v. 5, 1232–1237.

Anon.: Owing to the scarcity and high price of drugs and dyes and the impossibility of replenishing our supplies of some of them from abroad, it is high time that our patent laws were amended.—Drug. Circ. 1916, v. 60, p. 324.

Anon.: The National Association of Manufacturers of Medicinal Products at its annual meeting passed a resolution to the effect that the association is opposed to any amendment of the patent, trade-mark, and copyright laws of the United States of America that shall directly or indirectly effect discrimination against inventions and discoveries in chemistry, pharmacy, medicine, or surgery.—Pharm. Era, 1916, v. 49, p. 122.

Stewart, F. E.: Patents and trade-marks discussed with respect to the Goldwater ordinance of New York.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 83–91.

Anon.: An editorial discussing the perpetuation of patents by trade names, with special reference to aspirin.—J. Am. M. Assoc. 1916, v. 67, p. 515–516.

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Jessop, Earl N.: A classified German patent bibliography.—J. Ind. & Eng. Chem. 1916, v. 8, p. 1053–1054.

Anon.: Announcement is made that section 27 of the British patents and designs act of 1907 has been suspended during the continuance of the war and for six months thereafter by an act of Parliament dated November 23, 1915. The section referred to allows the revocation of any patent not worked in the United Kingdom within four years after date of granting.—Com. Rep. 1916, No. 5, p. 65.

Anon.: A discussion of proposed changes in French laws governing patents and trade-marks as they apply to the chemical and pharmaceutical industries.—Bull. Assoc. Gén. Syn. Pharm. France, 1916, v. 19, p. 33–37.

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McDonagh, J. E. R.: The rationale of chemotherapy in syphilis, with a description of some new drugs prepared with the knowledge gained therefrom.—Lancet, 1916, v. 190, p. 236–239.

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Loomis, Albert G., and Schlundt, Herman: A report of some experiments on the concentration of radium in carnotite ores.—J. Ind. & Eng. Chem. 1916, v. 8, p. 990–996.

Schlundt, Herman: Some experiments on the extraction of radium from carnotite ore with concentrated sulphuric acid.—J. Phys. Chem. 1916, v. 20, p. 485–494.

Furber, F. B.: An outline of the methods used in the Bureau of Chemistry for determining the radioactivity of such miscellaneous materials as bottled mineral waters and therapeutic preparations.—J. Assoc. Off. Agric. Chem. 1916, v. 2, part 1, p. 116–119.

W. P. J.: A book review of a volume by Frederick Soddy entitled *The Chemistry of the Radio Elements*.—Chem. Weekblad, 1916, v. 13, p. 1106.

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5. APPARATUS AND CONTAINERS.

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6. FILTERS.

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Gathercoal, E. N.: A list of the various botanical drugs recognized in 19 different pharmacopœias.—J. Am. Pharm. Assoc. 1916, v. 5, p. 286–293, 416–421, and 520–528.

Editorial: The monographs on vegetable drugs in the U. S. P. IX are exceptionally complete. Few facts appear to have been omitted

which would prove of value in determining the identity in quality of these products. These monographs are a great credit to the chairman of the committee on botany and pharmacognosy and place the subject of pharmacognosy as one of the important divisions of pharmacy.—Northwestern Druggist (The), 1916, v. 17, No. 8, p. 24.

Kraemer, Henry: The conservation and preservation of crude and powdered drugs have, for the first time, received the attention that the subject warrants. This has not been by any means exhaustively treated. But the precautions given will be found very practical and will undoubtedly prove of great value to the retail pharmacist in preventing the deterioration of his stock as well as monotary loss.—Pharm. Era, 1916, v. 49, p. 387.

Parry, Ernest J.: In the statement in connection with the preservation of vegetable or animal substances that portion which reads "It is not intended that this precaution should be used for drugs imported in bales or large original containers" is characterized as silly.—Chem. & Drug. 1916, v. 88, No. 1913, p. 40.

Schneider, Albert: A most notable omission in the U. S. P. descriptions of vegetable drugs is the failure to mention the behavior of starch granules under polarized light. On the other hand, frequent reference is made to the polarizing manifestations of such diagnostically unimportant substances as inulin, micro-crystallin, calcium oxalate, and resin particles, without, however, specifying what use or value, if any, these phenomena might have.—Drug. Circ. 1916, v. 60, p. 693.

Editorial: The new definitions and extended requirements of the Pharmacopœia will tend to increase the pharmacist's study of the collecting, packing, and storing of drugs in order that he may know the conditions they have passed through to reach him and in order that he may be able to value them accurately when they reach his store.—Pharm. Era, 1916, v. 49, p. 380.

Scoville, Wilbur L.: The descriptions of vegetable drugs in the U. S. P. IX are very full and verbose. Some of the sentences are not very illuminating except to an analytical botanist. Fortunately the retail druggist uses but very few vegetable drugs, and the botanical descriptions will trouble him but little.—Bull. Pharm. 1916, v. 30, p. 280.

Rusby, H. H.: The extensive descriptions which appear under vegetable drugs can not serve any practical purpose at the present time except in a few cases, but they may become important at any time in the future due to the fact that new adulterants and impurities are continually making their appearance.—Drug. Circ. 1916, v. 60, p. 539.

Scoville, Wilbur L.: A "purity rubric" adopted for most of the vegetable drugs in the Pharmacopœia is a statement which limits

the amount of stems and "other foreign matter" which can be allowed, and also places a limit on the yield of ash.—Bull. Pharm. 1916, v. 30, p. 362–363.

Rusby, H. H.: An unfortunate formula that appears in the specifications for the purity of a number of vegetable drugs is that of "or other foreign matter," instead of "and other foreign matter."—Drug. Circ. 1916, v. 60, p. 536.

Swildens, Johs. Jelgerhuis: Samples of the pharmacognostical descriptions intended for the Ph. Ndl.—Pharm. Weekblad, 1916, v. 53, p. 1565–1571.

Alsberg, C. L.: Tentative standards laid down by the Bureau of Chemistry are given for sabadilla seed, savory leaves, fenugreek seed, celery seed, and manna.—S. R. A.-Chem. 1916, No. 16, p. 30.

Jones, H. W.: A plea for further study of the chemistry and therapeutic activity of green plant drugs.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1340–1343.

Menzel, Max: The buying of drugs, chemicals, and pharmaceutical preparations. A practical discussion.—Proc. Minnesota Pharm. Assoc. 1916, p. 100–102.

Johnson, William N.: An enumeration, with descriptions, of some of the drugs used by pioneers.—Spatula (The), 1916, v. 22, p. 295–296.

Piorkowski: A discussion of the use of algæ and lichens as auxiliary and substitute materials for pharmaceutical purposes. Attention is directed to the possibility of substituting the mucilaginous extract of Irish moss for ointment bases, cold creams, glycerin, soap, etc.—Chem. Zentralbl. 1916, v. 2, p. 158.

Youngken, H. W.: A discussion of the economic importance of some members of the bayberry family. Information is given regarding their occurrence, constituents, and the technical uses to which the latter may be applied.—Drug. Circ. 1916, v. 60, p. 5–6.

van de Wielen, P.: A discussion of methods for the curing of vegetable drugs so that they may be preserved without change. An abstract.—Chem. & Drug. 1916, v. 88, p. 774–775.

Wodehouse, R. P.: A description of a simple method for obtaining ragweed pollen in large quantities.—Boston M. & S. J. 1916, v. 174, p. 430.

Anon.: Random notes on the flora of the dunes in northern France.—Pharm. J. 1916, v. 97, p. 274.

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van Berk, L. H.: Notes on the indigenous medicinal plants of Holland.—Pharm. Weekblad, 1916, v. 53, p. 862–865.

Anon.: A list of Italian medicinal plants compiled by Prof. Cortese.—Chem. & Drug. 1916, v. 88, No. 1879, p. 175.

Rosendahl, H. V., and Söderberg, I.: A contribution relative to the *pteridophyte* flora of Gothland.—Svensk farm. Tidskr. 1916, v. 20, p. 509–515, 529–534.

Anon.: A report on the constituents and physiologic action of some South African drugs and poisonous plants.—Bull. Imp. Inst. 1916, v. 14, p. 27–37; see also Chem. Abstr. 1916, v. 10, p. 2386.

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Hansen, Carl C.: A report on the production of crude drugs and spices in Siam for the year 1915.—Com. Rep. 1916, No. 55, p. 916.

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Anon.: A review of *Southall's Organic Materia Medica*, revised and enlarged by Ernest W. Mann, states that the volume is a handbook treating of the more important of the animal and vegetable

drugs made use of in medicine, including the whole of those contained in the Ph. Brit., and is designed for the use of teachers, pharmaceutical and medical students, chemists, druggists, and others.—Pharm. J. 1916, v. 96, p. 112.

Anon.: A book review of *Scientific and Applied Pharmacognosy*, by Henry Kraemer, states that the work will surely prove indispensable to pharmacists, and should be of much service to botanists in other fields.—Am. J. Sc. 1916, v. 41, p. 380.

W. C. De G.: A book review of a small volume by D. H. Webster on pharmacognosy for apprentices in pharmacy. The book is entitled *Pharmacognosie in tabellen-vorm, ten gebruike bij de opleiding voor apothekers-adsistent.*—Chem. Weekblad, 1916, v. 13, p. 1192.

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1. CULTIVATION OF MEDICINAL PLANTS.

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Stockberger, W. W.: A discussion of how to cultivate medicinal plants, based on experimental work conducted at the Bureau of Plant Industry.—Pharm. Era, 1916, v. 49, p. 179.

Ballard, C. W.: A discussion of our unpreparedness for carrying on the cultivation of medicinal plants at the present time.—Am. Druggist, 1916, v. 64, p. 260.

Stockberger, W. W.: An illustrated review of the available information relating to medicinal plant gardens operated in connection with teaching institutions. Also a review of some of the recent efforts to popularize the cultivation of drug plants.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1068–1075.

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Schlichting, A. F.: Comments of a general nature on the growing of medicinal plants.—Northwestern Druggist (The), 1916, v. 17, No. 10, p. 42–43.

Holmes, E. M.: A discussion of the subject of the cultivation of medicinal plants and the collection of herbs.—Pharm. J. 1916, v. 96, p. 101–102, 161–162.

Arny, L. Wayne: A general discussion of the methods employed in improving strains of medicinal plants under cultivation.—Mulford's Vet. Bull. 1916, v. 7, p. 100–103.

Kilmer, Fred B.: A discussion of the commercial future of drug cultivation in the United States.—Proc. New Jersey Pharm. Assoc. 1916, p. 45–46.

Anon.: A short article pointing out the limitations of the market to drug-plant growers. Mint, belladonna, digitalis, and lemon grass may be cultivated, but the country needs only a small supply.—Am. Food J. 1916, v. 11, p. 504.

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van Loren, H. A.: Notes on the cultivation of medicinal plants in ornamental gardens.—Pharm. Weekblad, 1916, v. 53, p. 121–129, 146–154, 199–202, 296–298, 342–349, 515–520, 631–637, 849–860, 1108–1116, 1262–1266, 1416–1423, 1690–1694.

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Jones, D. F.: A list of the medicinal plants growing in South Dakota is presented.—Northwestern Druggist (The), 1917, v. 18, No. 9, p. 54–56.

Sayre, L. E.: A description of a garden at Douglas, Mich., which yields over 500 pounds of hydrastis annually.—Drug. Circ. 1916, v. 60, p. 601.

Linton, Arthur W.: A discussion of the present status of medicinal plant cultivation in the Northwest.—Proc. Washington Pharm. Assoc. 1916, v. 61–67.

Maxwell, A. F.: A short report on the cultivation of drug plants in eastern Washington.—Proc. Washington Pharm. Assoc. 1916, p. 59–61.

London letter: A review of a lecture by E. N. Holmes on cultivation of medicinal herbs in England.—J. Am. M. Assoc. 1916, v. 66, p. 1563.

Anon.: It is stated that a medicinal plant nursery has been started at Chalfont St. Peter, Buckinghamshire, England, where students are given instruction in the cultivation and harvesting of medicinal plants.—Chem. & Drug. 1916, v. 88, p. 893.

Hale, Franklin D.: A note calls attention to the formation of the Women's Herb Growing Association in England, which has for its object the interesting of women in the cultivation of medicinal herbs wherever possible.—Com. Rep. 1916, No. 49, p. 825.

Guerman, P.: Notes on the cultivation and collection of medicinal plants in France.—Yearbook of Pharmacy, 1916, p. 264–265 from L'Union Pharm. 1916, v. 57, p. 121.

Zornig, Johann: A review of past results and future possibilities relative to the economic and commercial aspects of drug cultivation in Germany.—Pharm. Zentralh. 1916, v. 57, p. 244.

Anon.: Notes on the cultivation of chicory seed in Germany.—Oil, Paint & Drug Rep. 1916, v. 90, No. 14, p. 81.

Frost, Wesley: A note states that the Society of United Irish Women has taken up the subject of the culture of herbs in order to supply the demand for those drugs which are urgently needed.—Com. Rep. 1916, No. 49, p. 825.

Maiden, J. H.: A paper dealing with the cultivation of medicinal plants in New South Wales as affected by climatic and soil conditions.—Australas. J. Pharm. 1916, v. 31, p. 251.

Anon.: The President of Uruguay has directed the National Inspection Bureau of Live Stock in Agriculture to prepare a program of study and experiments on the cultivation and acclimatization of foreign medicinal plants, and also on the medicinal properties of native plants.—Com. Rep. 1916, No. 211, p. 925.

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2. POWDERED DRUGS.

Schneider, Albert: The introduction into the U. S. P. IX of descriptions of the microscopical characteristics of vegetable drugs and the powders made therefrom is by far the most important change in the entire work of revision. This one change alone places the U. S. P. in the front rank of the world's pharmacopœias.—Drug. Circ. 1916, v. 60, p. 692.

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Wallis, T. E.: A description of a method for the quantitative microscopic examination of powder mixtures. The method consists of mixing the powder with a definite amount of lycopodium, suspending in a liquid, and examining under the microscope.—Analyst (The), London, 1916, v. 41, p. 357–375.

Ballard, C. W.: Descriptions of the appearance of a number of different plant tissues when viewed under polarized light.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1323–1326.

Tschirch, A.: A comparative anatomy outline for solving questions in applied pharmacognosy.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 445–449.

Wall, Otto A.: A short historical account of the early development of vegetable taxonomy.—J. Am. Pharm. Assoc. 1916, v. 5, p. 954–963.

Greenish, Henry G.: Descriptions of microscopical methods, with special reference to the examination of drugs.—Analyst (The), 1916, v. 41, p. 195–202.

Dezani, S.: A comprehensive review of recent literature bearing on microsublimation and its application to the chemical investigation of drugs.—Chem. Zentralbl. 1916, v. 1, p. 1034.

Anon.: A review of a volume by William Mansfield entitled *Histology of Medicinal Plants*.—Bull. Pharm. 1916, v. 30, p. 519.

3. MOISTURE DETERMINATIONS.

Folpmers, T.: A description of a direct method for the determination of the moisture content of spices. The article includes data obtained by employing various different methods.—Chem. Weekblad. 1916, v. 13, p. 14–16.

Azzarello, E.: A description of a method for the determination of moisture in resinous woods. Illustrated.—Ann. chim. applicata. 1916, v. 6, p. 154–157.

Willing, P. A.: A description of an automatic apparatus for the determination of moisture.—Chem. Zentralbl. 1916, v. 1, p. 1213–1214.

Mallinckrodt, Edward: A review of methods for the determination of small amounts of alcohol and water in ether, with an outline of a modified specific gravity method as described by Reginault and Adrian.—J. Ind. & Eng. Chem. 1916, v. 8, p. 807–812.

Roark, R. C.: A report on the analysis of insecticides includes the results of a study of the determination of moisture in these materials.—J. Assoc. Off. Agric. Chem. 1915, v. 1, p. 435–457.

Anon.: A discussion of the occurrence and determination of water in creosote.—Chem. Abstr. 1916, v. 10, p. 107 from Proc. Am. Roy. Eng. Assoc. 1915, v. 16, p. 827–832.

West, R. M.: A report on the use of the calcium carbide method for the determination of moisture in syrups.—J. Ind. & Eng. Chem. 1916, v. 8, p. 31–35.

McGee, W. J.: A report of investigations dealing with the determination of moisture in various foods by means of dehydrating agents, such as H_2SO_4, CaC_2, Na, $CaCl_2$, P_2O_5, and BaO_2.—J. Assoc. Off. Agric. Chem. 1915, v. 1, p. 218–221.

Ronnet, L.: Notes on the determination of water in confections, jellies, and marmalades.—Ann. Falsif. 1916, v. 9, p. 145–146.

Winge, Ö.: A reply to a criticism of the author's work on the determination of moisture in hops.—Chem. Abstr. 1916, v. 10, p. 798.

4. ASH DETERMINATION.

Schneider, Albert: The ash percentages given in the U. S. P. are in some instances high, in fact, so high as to serve as an encouragement to the sophisticators. In the case of asafetida, it would be impossible to obtain the pharmacopœial ash standard (30 per cent) without adulterating the drug heavily with sand, clay, diatomaceous earth, dirt, or perhaps a very high percentage of vegetable matter rich in silica, as gramineous chaff.—Drug. Circ. 1916, v. 60; p. 693.

Tschirch, A.: A discussion of the causes for the wide variation in the ash content of digitalis, hyoscyamus, sage, kamaia, anise, saffron, valerian, and sarsaparilla.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 461–463.

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5. GLUCOSIDES.

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Kobert, R.: Notes on the classification and significance of the saponins.—Chem. Zentralbl. 1916, v. 2, p. 275.

Bourquelot, Aubry, Ciamician, and others: Experimental observations on the isolation, synthesis, and constitution of glucosides.—J. pharm. et chim. 1916, v. 14, p. 225, 289, and 359; see also Compt. rend. acad. sc. 1916, v. 163, p. 60 and 312; Ann. chim. 1916, v. 6, p. 5; J. Chem. Soc. Lond. 1916, v. 112, p. 41.

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Bourquelot, Em., and Aubry, A.: An account of the biochemical synthesis of a galactoside of saligenin, the β-salicylgalactoside.—J. pharm. et chim. 1916, v. 13, p. 273–279.

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Cuoghi-Constantini, Luisa: Notes on the microchemical location of the alkaloids and glucosides in some of the *Ranunculaceæ*.—Chem. Abstr. 1916, v. 10, p. 1661.

Straub, Walther: A discussion of the relationship between the chemical constitution and pharmacological action of the substance of the digitalis group.—J. Chem. Soc. Lond. 1916, v. 110, p. 618 from Biochem. Ztchr. 1916, v. 75, p. 132–144.

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Pearce, R. G.: A report of the results obtained in experimental researches to determine the effect of phloridzin on the digestive secretions. An abstract.—J. Am. M. Assoc. 1916, v. 66, p. 1819.

6. ALKALOIDS.

Lyons, A. B.: A general review of the changes in the alkaloidal standards appearing in the new edition of the U. S. P., with a table showing the relation of the old to the new standards.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1118–1120.

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alkaloids, the obtaining of new physiological effects, and the combination of one alkaloid with others in order to obtain valuable medicinal compounds.—Pharm. Zentralh. 1916, v. 57, p. 299–303, 342–346, 375–381, 411–413, 431–436, 462–466, 510–514, 546–550, 577–580, 604–610.

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Peset, Juan, and Buendia, Rogelio: A new reagent for producing color reactions with alkaloids and similar compounds consists of a mixture of sulphuric and titanic acids. The reactions of a number of alkaloids are described.—Anales soc. española fis. quim. 1916, v. 14, p. 257–263; see also Farm. Espan. 1916, v. 48, p. 503–505, 519–520; Répert. pharm. 1916, v. 28, part 1, p. 276.

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7. MISCELLANEOUS PLANT CONSTITUENTS.

Schryver, Samuel B., and Haynes, Dorothy: Researches on the preparation and properties of the pectic substances of plants.—Biochem. J. 1916, v. 10, p. 539–547.

Rinkes, I. J., and van Hasselt, J. F. B.: Researches on the chemical constitution of bixin, a constituent of annatto.—Chem. Weekblad, 1916, v. 13, p. 436–442, 1224–1229; see also van Hasselt, p. 429–436.

Jumeau, J.: Notes on the chemical constitutents of "patience root" and on the species of *Rumex* from which it is obtained.—Bull. sc. pharmacol. 1916, v. 23, p. 97–105.

Ultée, A. J.: On the composition of the milky juice obtained from *Tabèrnæmontana sphærocarpa* Bl.—Chem. Weekblad, 1916, v. 13, p. 183–185.

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Crawford, Albert C., and Watanabe, Walter K.: A note on the occurrence of p-hydroxyphenylethylamine in various mistletoes.—J. Biol. Chem. 1916, v. 24, p. 169–172.

8. ASSAY PROCESSES.

Beringer, George M.: The changes in the assay processes of the U. S. P. have introduced several new features, such as the use of purified sawdust as a distributing medium, and the adoption of the aliquot part method.—Am. Druggist, 1916, v. 64, No. 8, p. 24.

Asher, Phillip: There is one feature regarding the assay methods that should be seriously considered by the revisers of the U. S. P., and that is, to give a succinct explanation of the philosophies underlying these methods.—Southern Pharm. J. 1916, v. 9, p. 184.

Scoville, Wilbur I.: In an article entitled "A plea for pharmaceutical research," the introduction into the U. S. P. of assays for gelsemium, lobelia, and veratrum is recommended.—Bull. Pharm. 1916, v. 30, p. 417.

Stout, Henry: Criticisms of the various volumetric assays of the Ph. Brit.–Pharm. J. 1916, v. 96, p. 190, 218–220, 245–246.

Beal, George D., and Brady, St. Elmo: A preliminary report on the hydrochloride method for the determination of alkaloids.—J. Ind. & Eng. Chem. 1916, v. 8, p. 48.

Beal, George D., and Lewis, Harry F.: A general discussion of the problems involved in the estimation of alkaloids by means of immiscible solvents with a report, largely in the form of tables, on experimental work with a variety of alkaloids. The authors conclude that the most practical method for the determination of alkaloids involves the extraction of the latter from an aqueous solution by means of an immiscible solvent, such as chloroform or ether and subsequent purification of the alkaloidal solution by similar methods.—J. Am. Pharm. Assoc. 1916, v. 5, p. 812–836.

van Itallie: Comments on the Ph. Ndl. methods for determining the alkaloidal content of belladonna extract, pomegranate bark, and quinine in various preparations.—Pharm. Weekblad, 1916, v. 53, p. 1661–1671.

Vanderkleed, C. E., and E'we, G. E.: A presentation of experimental data to show the necessity for treating alkaloidal residues obtained by chloroform with ether before attempting to dry to constant weight. If this procedure is not followed, high results are obtained owing to the tenacity with which such residues retain chloroform.—J. Am. Pharm. Assoc. 1916, v. 5, p. 713.

Dott: A note on the use of methyl orange as an indicator for the titration of alkaloids.—Pharm. J. 1916, v. 96, p. 368; see also Ann. Falsif. 1916, v. 9, p. 320.

Pereira, A. C.: A description of a method for the purification of the chloroform and ether residues obtained in the forensic determination of alkaloids.—Chem.-Ztg. 1916, v. 40, p. 39.

Wilbert, M. I.: Statistics relating to the assay methods and purity requirements of the U. S. P. and N. F.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1329–1331.

Carlinfanti, Carl, and Scelba, M.: A description of certain colorimetric methods for the quantitative determination of the alkaloids of nux vomica and opium.—Boll. chim.-farm. 1916, v. 55, p. 225–232.

Anon.: Data showing the alkaloidal content of some solanaceous drugs from South Africa.—Bull. Imp. Inst. 1916, v. 14, p. 21–27; see also Chem. Abstr. 1916, v. 10, p. 2386.

Kissling, Richard: A discussion of methods for the determination of the nicotine content of tobacco.—Chem.-Ztg. 1916, v. 40, p. 594–595.

Rasmussen, H. B.: A critical study of the Kissling, Bertrand and Javillier, Keller, Toth, Chapin, Ulex, and Koenig methods for the determination of nicotine in tobacco. Results obtained by the various methods, including Rasmussen's procedure as a standard (cf. C. A. 9, 3326), are reported and discussed in detail. Numerous references to the literature are given.—Ztschr. anal. Chem. 1916, v. 55, p. 81–133; see also Chem. Abstr. 1916, v. 10, p. 1575.

E'we, George E.: Presents the following comparison of assays of crude drugs for the years 1909 to 1916, inclusive:

Year.	Total.	Above.	Below.	Per cent above.
Report of—				
1909	395	313	82	79.3
1910	340	291	49	85.6
1911	263	224	39	85.1
1912	298	235	63	78.8
1913	382	264	118	69.1
1914	286	221	65	77.2
1915	133	98	35	73.6
1916	214	156	58	72.9

Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

9. PHYSIOLOGICAL STANDARDIZATION.

Millard, E. J.: The U. S. P. has always led the way regarding standards and assay methods, and it is not surprising, therefore, to find biological tests given in detail for cannabis, suprarenal gland, aconite, digitalis, strophanthus, and squill, and their preparations.—Pharm. J. 1916, v. 97, p. 367.

Beringer, George M.: The appearance in the U. S. P. IX of several methods for the biological assaying of drugs marks the first time that assays of this nature have been given recognition by any of the pharmacopœias.—Am. Druggist, 1916, v. 64, No. 8, p. 24.

Schneider, Albert: The most complete and most concise addition to Part 2 of the U. S. P. IX is the chapter on biological assays. It is not clear, however, why the physiological assay for ergot is not included; nor is it clear why the assay for cannabis should be compulsory whereas that for the far more important drug, digitalis, is not compulsory.—Drug. Circ. 1916, v. 60, p. 693.

Rusby, H. H.: The contribution of the revision committee in the way of biological standardization is certainly conservative. The results accruing therefrom will be awaited with great interest and, by many, with confidence.—Drug. Circ. 1916, v. 60, p. 539.

Saylor, W. M.: On the use of plants for the standardization of drugs. Results showing the effect of strychnine nitrate, tincture of digitalis and fluid extract of ergot in varying concentrations on the seedlings of *Lupinus albus* are given.—Am. J. Pharm. 1916, v. 88, p. 8–12.

Zeigler, W. H.: A criticism of the biologic methods for the standardization of digitalis, with a suggestion for a new method. The fresh-water terrapin, or turtle, is suggested as the test animal.—J. Am. Pharm. Asoc. 1916, v. 5, p. 1188–1193.

8. PHARMACEUTICAL PREPARATIONS.

Anon.: The highest duty which a pharmacist can perform to humanity is the making of medicinally active preparations, and his principles and ideals should prevent him from selling any other kind.—N. A. R. D. J. 1916, v. 23, p. 193.

Robin, D. N., and Wetterstroem, T. D.: Two papers urging the organization of a commission of retail druggists for the purpose of putting on the market a national line of nonsecret remedies.—J. Am. Pharm. Assoc. 1916, v. 5, p. 695.

Sennewald, E. A.: An article pointing out the financial advantages of making pharmaceutical preparations in the drug store laboratory.—Meyer Bros. Drug. 1916, v. 37, p. 363.

Connolly, F. W.: An article pointing out the advantage to the pharmacist of making his own preparations.—J. Am. Pharm. Assoc. 1916, v. 5, p. 49.

Hilton, S. L.: Saccharin has been eliminated from all N. F. preparations in order to conform to the rulings under the food and drugs act.—Bull. Pharm. 1916, v. 30, p. 281.

van der Wielen: A description of a method for the preparation of dialysates from fresh digitalis leaves or other fresh plants. An abstract.—Drug. Circ. 1916, v. 60, p. 757.

Marotta, Domenico: In an article dealing with the preparation of casein and its technical uses, the author describes a number of medicinal preparations made therewith.—Ann. chim. applicata, 1916, v. 5, p. 165–176.

Anon.: A review of the fifth edition of *Caspari's Treatise on Pharmacy*. The work is stated to have been enlarged and revised in a manner to bring it in harmony with the new edition of the U. S. P.—Bull. Pharm. 1916, v. 30, p. 519.

1. GENERAL FORMULAS.

Beringer, George M.: The instructions of the pharmacopœial convention to adopt general formulas wherever possible have been partially carried out by the introduction of general instructions for the preparation of aromatic waters and by the presentation of general formulas and classifications for the fluid extracts and tinctures.—Am. Druggist, 1916, v. 64, No. 8, p. 24.

Raubenheimer, Otto: An explanation of the "general formulas" for "type processes" of the U. S. P. for the benefit of pharmacists and students of pharmacy.—J. Am. Pharm. Assoc. 1916, v. 5, p. 984–988.

Anon.: A review of the National Formulary states that the type processes for fluid extracts may and may not be an advantage. If the type processes are used for the purpose of saving space little is gained: at least not enough to offset the advantage of having each formula complete. If, however, the idea is to discredit the fluid extract and thus to make argument for the addition of the 50 per cent tinctures in the next revision, then they serve a useful purpose.—N. A. R. D. J. 1916, v. 22, p. 939.

Zotier, V.: General formulas for the preparation of istonic solutions.—Bull. sc. pharmacol. 1916, v. 23, p. 219–225.

2. CHANGES IN STRENGTH.

Scoville, Wilbur L.: A discussion of the changes in strength of the galenicals of the U. S. P.—Bull. Pharm. 1916, v. 30, p. 323–324.

Beringer, George M.: From a therapeutic standpoint, the changes made in the strength of the galenical preparations of the U. S. P. are, as a rule, negligible. For the most part they have been of minor importance and are not sufficient to affect either the action or the dosage of the preparations.—Am. Druggist, 1916, v. 64, No. 8, p. 23.

Hilton, S. L.: Many of the N. F. preparations have been reduced in alcoholic strength for the purpose of eliminating the possibility of their use as beverages. Some of the narcotic preparations have also been changed so that they come within the exceptions of section 6 of the Harrison law.—Bull. Pharm. 1916, v. 30, p. 281.

3. STANDARDIZATION.

Remington, J. P.: The standards which have been adopted for the new U. S. P. are reasonably easy of accomplishment, and there should be no difficulty in obtaining the official preparations throughout the United States. It is not necessary, and it would be extremely wasteful for the physician to require the absence of all impurities. The Pharmacopœia sets limits only on certain obnoxious substances, as salts of arsenic, mercury, copper, lead, zinc, etc. The presence of 1 per cent, more or less, of innoxious salts like the chlorides, sulphates, nitrates, etc., within narrow limits, can have no possible effect in the treatment of any disease.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 136.

Scoville, Wilbur L.: In an article treating of the standardized preparations of the new edition of the N. F., it is stated that it has been the purpose of the revision committee to follow established standards in all articles as far as consistency permitted. Consequently most of the new standards will be found to accord with preparations now in the market, but they will have the added weight of authority.—Bull. Pharm. 1916, v. 30, p. 324–325.

4. REQUIREMENTS.

Wilbert, M. I.: The change in the nature of the official requirements is due to the fact that many critics of the previous edition of the Pharmacopœia of the United States have called attention to the desirability of having a clear, concise definition for each article or preparation, with a minimum and maximum limit for the active ingredients, to be accompanied by practical methods for their determination.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1329.

Beringer, George M.: In a discussion of the U. S. P. as a safeguard against adulteration, it is stated that it is unfortunate that some of those who are engaged in the drug business have not yet learned of the adequacy of this work and have failed to study its requirements.—J. Am. Pharm. Assoc. 1916, v. 5, p. 603–606.

Rusby, H. H.: It is worthy of note that, in specifying the required percentage of alkaloid in a vegetable drug, the Pharmacopœia now requires that this shall be the alkaloid or alkaloids of that particular drug.—Drug. Circ. 1916, v. 60, p. 538.

Dickman, George C.: Many of the allowable limits within which official standards may vary would seem to be too finely drawn. The

limits for the camphor content of camphor liniment are cited as an example.—Pract. Drug. 1916, v. 34, No. 10, p. 23.

5. GALENICALS.

Murray, David: In order to arrive at greater simplicity in galenicals, the author suggests that one definite preparation be made official for each drug, and that all such preparations might be of such a strength that the dose would be from 5 to 15 minims.—Pharm. J. 1916, v. 96, p. 190.

Lascoff, J. Leon: A list of the changes in the galenicals of the U. S. P. and N. F. All of the preparations in which a change occurs are indicated seriatim.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1112–1117; see also Am. Druggist, 1916, v. 64, No. 10, p. 25–28.

Beringer, G. M.: An enumeration of the reasons for some changes in the fluid extracts and the tinctures of the new U. S. P.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1390.

Diekman, George C.: A general review of the galenicals of the U. S. P. IX, with some remarks on those which were deleted.—Pract. Drug. 1916, v. 34, No. 10, p. 23, 27.

Raubenheimer, Otto: A discussion of the 16 galenicals added to the U. S. P.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1335–1339.

Lyons, A. B.: In a discussion of the changed alkaloidal standards in the U. S. P. IX, the author presents a table for adjusting the alkaloidal strength of preparations of the U. S. P. VIII to those of the U. S. P. IX.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1118–1120.

Heiduschka, A., and Schmid, J.: A report of investigations dealing with the behavior of certain galenicals toward Fehling's solution.—Chem. Zentralbl. 1916, v. 2, p. 698.

Kunz-Krauze, Hermann: A method for the detection of the minutest quantities of pyridine in galenicals, with special reference to those which may have been prepared with denatured alcohol.—Chem. Zentralbl. 1916, v. 2, p. 699.

Fischelis, R. P.: In a paper discussing the high price of drugs and chemicals due to war conditions, the pharmacist is urged to push the sale of galenical preparations rather than alkaloids, which latter are stated to be very expensive at present.—J. Am. Pharm. Assoc. 1916, v. 5, p. 411.

6. DETERIORATION.

Caspari, Chas., jr.: Report of the committee on drug deterioration of the Association of American Dairy, Food and Drug Officials.—Am. Food J. 1916, v. 11, p. 407–408.

Danhauer, William E.: A paper pointing out how a little care in the handling of drugs and pharmaceutical preparations will result in the saving of many products which are prone to deteriorate.—Bull. Pharm. 1916, v. 30, p. 474.

Kimmich, E.: A report of investigations to determine the causes for the deterioration of elixirs containing iron salts.—Canadian Pharm. J. 1916, v. 49, p. 223.

Congdon, Leon A.: An inspection of the drug stores of Kansas showed that the fluid extracts on the shelves were deteriorated in many instances. A list of names of the deteriorated fluid extracts is given.—Proc. Kansas Pharm. Assoc. 1917, p. 88.

Francis, J. M.: If properly protected from light, contact with air, and the loss of alcohol, a normal activity may be expected for the fluid extracts of belladonna leaves or root, ipecac, nux vomica, and opium for a period of at least three years and in many cases for five or six years.—Am. Food J. 1916, v. 11, p. 408.

Caspari, Charles, jr.: The deterioration of all galenical preparations of coca leaves is beyond control in the light of our present knowledge concerning the chemistry of the latter.—Am. Food. J. 1916, v. 11, p. 407.

Francis, J. M.: Preparations containing glucosides and, to a lesser degree, those containing alkaloids, are bound to deteriorate on keeping.—Am. Food J. 1916, v. 11, p. 408.

Anon.: Notes on the decomposition of iodoform ointment and suppositories. Iodoform in contact with most fatty products is slowly decomposed into methylene iodide and iodine. Free exposure to light, as well as rancidity of the fat, hastens this decomposition. Moisture-free fats only should be used.—Am. Drug. 1916, v. 64, No. 8, p. 40.

Editorial: Chloroform is a useful preservative for medicines dispensed in aqueous solution. If used sparingly, it is agreeable to most persons.—Apothecary (The), 1916, v. 13, No. 9, p. 29.

7. INCOMPATIBILITIES.

Gilmour, J. P.: A discussion of the subject of incompatibility from the viewpoints of theory and practice. Illustrated with exemplary prescriptions.—Pharm. J. 1916, v. 96, p. 43–44; Am. Druggist, 1916, v. 64, No. 4, p. 28–30.

Wolfe, J. C., and Lascoff, J. L.: a presentation of 25 prescriptions, with a discussion of the difficulties encountered in compounding them.—Am. Druggist, 1916, v. 64, p. 215.

Linton, A. W.: A discussion of a number of incompatibilities, among which are mentioned some combinations of aspirin with euquinine in powders or capsules.—Pract. Drug. 1916, No. 10, p. 31.

Anon.: A book review calls attention to a brochure by Thos. Stephenson entitled *Incompatibility in Prescriptions, and How to Avoid It.*—Pharm. J. 1916, v. 96, p. 29.

Several authors: Notes on some difficulties encountered in the dispensing of prescriptions.—Am. Druggist, 1916, v. 64, p. 215–216; *see also* Brit. & Col. Pharm. 1916, v. 69, p. 156, 330.

Astruc, A., and Cambe, J.: Observations on the incompatibility of sodium bicarbonate with certain salts, especially bismuth salicylate.—J. pharm. et chim. 1916, v. 14, p. 353–356; *see also* E. Canals, v. 15, p. 145–149.

Hill, J. Retherford: On the incompatibility of solutions of sodium salicylate and iodine.—Farm. Espan, 1916, v. 48, p. 488.

Perez, L.: The incompatibility of sodium borate with mercuric chloride and potassium chlorate.—Farm. Espan. 1916, v. 48, p. 25.

8. EXTRACTION.

Mayer, Fritz: A discussion of the importance of ultrafiltration in the extraction of drugs, with special reference to the clinical action of holopon, the opium filtrate.—Deutsch. med. Wchnschr. 1916, v. 42, p. 224–225.

McNair, James B.: An illustrated description of an original type of extractor which was used successfully in extracting plant material with gasoline.—J. Ind. & Eng. Chem. 1916, v. 8, p. 838.

Kippenberger, C.: Illustrated descriptions of several new forms of extraction apparatus.—Ztschr. angew. Chem. 1916, v. 29, p. 351–352, 359–360.

9. STERILIZATION.

Smith, A. R.: Detailed descriptions of methods of sterilization and preparation of culture media.—Pharm. J. 1916, v. 96, p. 97, 189, 421, 639, and v. 97, p. 234, 294.

Raubenheimer, Otto: The introduction into the National Formulary of a chapter on sterilization is commended in view of its increasing importance in pharmacy and medicine.—D.-A. Apoth.-Ztg. 1916, v. 37, p. 78.

Schneider, Albert: The dry heat temperature recommended in the U. S. P. for the sterilization of glassware, metal utensils, cotton, bandages, gauzes, and ligatures, is from 160° to 170° centigrade for two hours. This temperature for that period of time reduces the tensile strength of all cotton fabrics, and of course, can not be applied to catgut ligatures.—Drug. Circ. 1916, v. 60, p. 694.

Hasseltine, H. E.: From experiments, it is concluded that moist heat is the most effective agent for the sterilization of all metal instruments. The method of procedure is described in detail.—Bull. Hyg. Lab. 1916, No. 101.

Goris, A.: On the preparation and sterilization of catgut for surgical use.—Bull. sc. pharmacol. 1916, v. 23, p. 67–81, 141–151.

Corper, H. J.: An illustrated description of an electrical furnace for sterilizing innoculating loops.—J. Am. M. Assoc. 1916, v. 66, p. 187.

Penau, H.: A general discussion of the sterilization of water in the field with special reference to a new method of "javellisation."—J. pharm. et chim. 1916, v. 13, p. 377–385.

10. FORMS OF ADMINISTRATION.

Becker, M.: A short account of the history and preparation of intravenous solutions.—J. Am. Pharm. Assoc. 1916, v. 5, p. 846–847; see also Rocky Mountain Druggist (The), Denver, 1916, v. 30, No. 4, p. 11–12.

Baldi, Baldo: The technique of preparing solutions for hypodermic use.—Boll. chim.-farm. 1916, v. 55, p. 161–168.

Fantus, Bernard: A discussion of candy medication, including formulæ for a number of preparations.—J. Am. M. Assoc. 1916, v. 66, p. 26–28.

Harman, N. B.: A note on a stable vehicle for use in the preparation of ophthalmic solutions of alkaloids.—Brit. M. J. 1916, v. 2, p. 178.

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	Examined.	Rejected.	
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ACIDUM SULPHURICUM DILUTUM.

Anon.: Of seven samples of dilute sulphuric acid examined four were above standard.—Proc. Minnesota Pharm. Assoc. 1916, p. 210.

ACIDUM TANNICUM.

Dekker J.: A discussion of the significance of tannin in the make-up of plants.—Pharm. Weekblad, 1916, v. 53, p. 1477–1496, 1526–1551.

van Wisselingh, C.: The detection of tannin in plants and its physiological significance.—Chem. Abstr. 1916, v. 10, p. 2361 from Pharm. Weekblad, 1915, v. 52, p. 1349–1355.

Swift, E. G.: One lot of tannic acid was rejected on account of its dark color.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

Frary, Guy G.: All of the 11 samples of tannic acid examined for ash content were passed.—Rep. South Dakota F. & D. Com. 1916, No. 16, p. 144–145.

Anon.: Experiments conducted in Germany show that a 5 per cent solution of tannin in alcohol is a good substitute for tincture of iodine.—Chem. & Drug. 1916, v. 88, p. 38.

ACIDUM TARTARICUM.

Baekland and Peter: A method for the electrolytic production of tartaric acid. U. S. Patent No. 1,190,485, July 11.—Chem. Abstr. 1916, v. 10, p. 2173.

Hartmann, B. G., et al.: Researches on the quantitative determination of tartaric acid.—J. Ind. & Eng. Chem. 1916, v. 8, p. 422–425.

Carles, P.: Notes on some irregularities observed in the determination of tartaric acids in lees and tartars.—Répert. pharm. 1916, v. 28, part 1, p. 3–4.

ACIDUM TRICHLORACETICUM.

Vanderkleed, C. E.: None of the samples of trichloracetic acid examined gave a faint reddish color with ferric chloride as required by the U. S. P., but even reagent acids refused to conform to this test.—J. Am. Pharm. Assoc. 1916, v. 5, p. 536.

ACONITINA.

Tunmann, O.: In a series of articles dealing with the microchemical analysis of drugs, the first article is devoted principally to a discussion of the detection of aconitine in toxicological cases.—Pharm.-Ztg. 1916, v. 60, p. 49.

ACONITUM.

Danesi, Dario: Note on the International Pharmacopœia. A comparative study of aconite in the light of the Italian, German, English, and French pharmacopœias.—Boll. chim.-farm. 1916, v. 55, p. 417–421.

Kourrote: A report of a study of *Aconitum orientale* and *A. napellus* gathered in Russia.—J. pharm. et chim. 1916, v. 13, p. 328–329 from Pharmazevtizeski J. 1916, p. 76.

Fraser, Thomas R.: A contribution to the pharmacology of *Aconitum heterophylloides*, *Aconitum nagarum*, and *Aconitum napellus*.—J. Pharmacol. & Exper. Therap. 1916, v. 9, p. 43–56.

Achard, H. J.: A clinical study of aconite, its alkaloids and preparations.—Am. J. Clin. Med. 1916, v. 23, p. 1004–1006.

Roberts, J. G.: All samples of aconite root examined were U. S. P. with the exception of one, which was wormy and dirty.—Proc. Pennsylvania Pharm. Assoc. 1916.

Vanderkleed, C. E.: Of five samples of aconite root examined, the highest alkaloidal content observed was 0.626 per cent and the lowest 0.360 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 536.

Ewe, G. E.: Of 11 samples of aconite root assayed, the aconitine content of two was above standard, and in nine samples, it was below standard.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

Anon.: The aconitine content of four samples of aconite leaves assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

ADEPS.

Parry, Ernest J.: A modified Becchi test is given in the U. S. P. for this fat to preclude the presence of cotton seed fats. The test, unless accompanied by quantitative tests for the adulterant is worthless, as the fat from hogs fed on cotton cake often gives a marked Becchi reaction.—Chem. & Drug. 1916, v. 88, No. 1913, p. 40.

Anon.: G. M. Arrowsmith finds that lard may be prevented from becoming rancid by immerging a small bottle of formalin in it. A small glass tube is inserted through the cork of the bottle and is of sufficient length to just project above the surface of the lard.—Bull. Pharm. 1916, v. 30, p. 123.

Koester: A formula, with directions, for the preparation of a lard substitute.—Pharm. Zentralh. 1916, v. 57, p. 254.

ADEPS BENZOINATUS.

Williams, Ed. E.: A modification of the U. S. P. process for making benzoinated lard is described.—Am. Druggist, 1916, v. 64, No. 3, p. 25.

ADEPS LANÆ.

Ayers, E. E.: A discussion of methods for the recovery of wool fat. A centrifuge for this purpose is stated to be on the market at this time.—Chem. Abstr. 1916, v. 10, p. 1278 from Met. Chem. Eng. 1916, v. 14, p. 317–318.

Swift, E. G.: Wool fat of medicinal quality is difficult to obtain. It is usually dark in color and strong in odor, and frequently shows an excess of sulphur compounds.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

Röhmann, F.: Analytical data dealing with the constitutents of wool fat.—Biochem. Ztschr. 1916, v. 77, p. 298–328.

Richardson, F. W., and Bracewell, G. A.: A discussion of the analysis of waxes, with special reference to beeswax and wool wax.—J. Soc. Chem. Ind. 1916, v. 35, p. 160–163.

Roberts, J. G.: Two samples of the American product were found to be adulterated with petrolatum; 13 samples were found to contain 2 to 12 times as much acid as allowed by the U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 108.

Lilly, J. K.: Some of the samples of wool fat examined were found to be adulterated with lard stearin.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

Descriptions of various substitutes for wool fat.—Chem. & Drug 1916, v. 88, p. 341; see also Schweiz. Apoth.-Ztg. 1916, v. 54, p. 33.

ADONIS.

Lilly, J. K.: One lot of *Adonis annua* was offered as true *Adonis vernalis*.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

ÆTHER.

Kirby, H. A.: A reprint of a portion of a thesis on the history of anesthetics giving an account of the early use of ether for producing anesthesia.—Drug. Circ. 1916, v. 60, p. 749–751.

Mallinckrodt, Edward, jr.: Doubt is expressed as to the ability to prepare ether by the usual process of distillation which will comply strictly with the requirements of the present Pharmacopœia. Methods for determining small amounts of alcohol and water in ether are described.—J. Ind. & Eng. Chem. 1916, v. 8, p. 807–812.

Scoville, Wilbur L.: Owing to the tendency of ether to oxidize in containers from which a part of the contents has been removed, the Pharmacopœia now specifies that ether for anesthesia shall be taken from freshly opened, full containers.—Bull. Pharm. 1916, v. 30, p. 362.

Schenck, D.: The author confirms the observations of Herzog with respect to ether for anesthesia, and states further that in case the potassium hydroxide test of the German pharmacopœia proves to be negative the operation should be repeated after the ether has been evaporated to two-thirds or one-half of its original volume.—Apoth.-Ztg. 1915, v. 31, p. 290–291; see also Chem. Zentralbl. 1916, v. 87, part 2, p. 345.

Embley, E. H.: As formaldehyde may be a constituent of methylated ether, this product should not be used for anesthesia.—Physiol. Abstr. 1916, v. 1, p. 326–327.

Van Itallie, L., and van der Zande, J.: A note on the influence of peroxide contained in commercial ether on the results obtained in alkaloidal assays.—Pharm. Weekblad, 1916, v. 53, p. 1.

Frankforter, G. B., and Daniels, E. A.: A report of researches dealing with the action of aluminum chloride on ether.—Chem. News, 1916, v. 114, p. 22–23, 30–31.

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Herb, Isabella C.: Ether—simplicity in its administration. The normal anesthetic state should closely resemble natural, physiologic sleep, and any departure therefrom may with safety be assumed to be due to the improper selection of the anesthetic agent, to faulty technic in its administration, or to the improper preparation of the patient for anesthesia.—J. Am. M. Assoc. 1916, v. 66, p. 1376–1379.

McCormick, A. S.: Ether when properly given will not cause vomiting in from 70 to 80 per cent of cases, a percentage in every way the equal of that of gas if the truth were admitted and not concealed.—J. Am. M. Assoc. 1916, No. 1, p. 49.

Saliba, John: The antiseptic action of ether in peritoneal infections, with reports on several cases.—J. Am. M. Assoc. 1916, v. 66, p. 1295–1297.

Evropin, A. K. and others: Ether-oil rectal anesthesia in surgery. A review of several contributions on the subject.—J. Am. M. Assoc. 1916, v. 67, p. 83 from Russiky Vrach, 1916, v. 15, No. 12.

ÆTHER ACETICUS, N. F.

Anon.: A reprint of the standards proposed for ethyl acetate by the committee on unofficial standards.—J. Am. Pharm. Assoc. 1916, v. 5, p. 86.

AGAR.

Holmes, E. M.: The monograph on agar would be more correct if it read: "The dried mucilagenous substance extracted from the several species *Gelidium* (class *Rhodophyceae*)."—Pharm. J. 1916, v. 97, p. 484.

Fellers, C. R.: Researches on the analysis and purification of agar-agar and on some of its chemical properties.—J. Ind. & Eng. Chem. 1916, v. 8, p. 1128–1133.

Noyes, H. A.: A description of tests for use in selecting samples of agar for bacteriological use.—Science, 1916, v. 44, p. 797–798.

Serger: A method for the recovery of agar used for bacteriological purposes.—Chem. Zentralbl. 1916, v. 2, p. 671.

Loeper et al.: A preliminary study of the suitability of agar for use as a dressing for wounds.—Compt. rend. soc. biol. 1916, v. 79, p. 660–662.

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Ostromuislenskii, I. I.: A note on the use of picramic acid as a reagent for albuminous substances, such as egg albumen, peptone albumose, etc.—Chem. Abstr. 1916, v. 10, p. 68.

Rakuzin, M. A., et al.: A discussion of the limits of sensitivity of certain color reactions for albumens and peptonizing enzymes.—Chem. Abstr. 1916, v. 10, p. 1655.

Maignon, F.: A report of researches to determine the effect of seasons on the toxicity of egg albumen when fed to white rats.—Exper. Sta. Rec. 1916, v. 35, p. 61.

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ALCOHOL.

Kressman, F. W.: Ethyl alcohol from wood, the development of the process, and its requirements.—Chem. Abstr. 1916, v. 10, p. 2400 from Met. Chem. Eng. 1916, v. 15, p. 78–82.

Benson, H. K.: A description of the preparation of alcohol from sawdust.—Pure Products, 1916, v. 12, p. 398–401.

Freeman, W. K.: A method for producing alcohol from carbon and hydrogen, through ethylene and ethyl sulphate. Norwegian Patent No. 26,801, Mar. 27.—J. Am. Pharm. Assoc. 1916, v. 10, p. 1910.

Boomer, J. F.: Data showing the comparative cost of producing alcohol in the Philippine Islands using various native plants or plant products.—Com. Rep. 1916, No. 138, p. 988–989.

Anon.: Data showing the percentage strength of the alcohols official in the various pharmacopœias.—Pharm. Weekblad, 1916, v. 53, p. 1621–1629.

Evans, P. M.: Data showing the boiling and condensing points of alcohol-water mixtures.—J. Ind. & Eng. Chem. 1916, v. 8, p. 260–262.

Anon.: Agitation of alcohol with liquid paraffin is suggested as a means of removing mechanical impurities. An abstract.—Pharm. J. 1916, v. 96, p. 105.

Rodt, V.: Notes on the determination of very small quantities of water in alcohol by means of the critical solution temperature. An abstract.—J. Soc. Chem. Ind. 1916, v. 35, p. 938; see also Analyst (The), 1916, v. 41, p. 316.

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Ehrlich, J.: A description of a method for the determination of ethyl alcohol in the presence of phenol.—J. Ind. & Eng. Chem. 1916, v. 8, p. 240.

Slack, H. F.: A description of tests which should be applied to alcohol when intended for use in the manufacture of perfumes.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 268.

Lyons, A. B.: The official process for the quantitative determination of alcohol in pharmaceutical preparations should be amended to require that both volume measurements be made at 60° F. The weighing can then be made at any convenient temperature, the percentage being deduced from the official alcohol tables.—J. Am. Pharm. Assoc. 1916, v. 5, p. 807–809.

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Slack, H. F.: A description of methods for the quantitative determination of alcohol in essences and similar preparations.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 269.

Harms, Herman: Of 53 samples of alcohol examined 5 were rejected.—Rep. Utah D. & F. Com. 1916, p. 95.

Lythgoe, Hermann C.: Of 65 samples of alcohol examined 7 were adulterated.—Rep. Massachusetts Bd. Health, 1916, p. 450.

Terry, R. W.: One of four samples of alcohol examined was below the U. S. P. standard.—Proc. Ohio Pharm. Assoc. 1916, p. 59.

Reich, H. W.: The influence of alcohol drinking.—Chem. Abstr. 1916, v. 10, p. 2105, from Arch. Hyg. 1916, v. 85, p. 61–116.

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Editorial: New evidence against alcohol. A review of several recent communications and the conclusion that these scientific findings leave the conclusion of Quensel unimpeached. "Work and alcohol," he said, "do not belong together, especially when work demands wide-awakeness, attention, exactness, and endurance."—J. Am. M. Assoc. 1916, v. 66, p. 742–743.

Editorial: Alcohol and immunity. A review of several recent contributions on the subject.—J. Am. M. Assoc. 1916, v. 66, p. 962 and 1122.

McIver and Price: In a series of 147 cases of drug addiction studied at the Philadelphia General Hospital, 108 patients said that they had never used alcohol at all, and none of the patients were confirmed alcoholics, although a number used alcohol to excess prior to the formation of the drug habit.—J. Am. M. Assoc. 1916, v. 66, p. 477.

ALCOHOL, DENATURED (NONOFFICIAL).

Anon.: A list of formulas for denaturing alcohol approved by the Commissioner of Internal Revenue at Washington, D. C.—Virginia Pharm. 1916, v. 1, p. 70.

Billström, J.: In order to prevent the toxic effects resulting from the drinking of alcohol denatured with methyl alcohol, the author proposes that an emetic be used as the denaturant. An abstract.—J. Am. M. Assoc. 1916, v. 66, p. 612.

Anon.: Comments on the official formulas for the denaturing of alcohol.—Rocky Mountain Druggist (The), Denver, 1916, v. 30, No. 2, p. 25–26.

Anon.: Of 20 samples of denatured alcohol examined none was found to be adulterated.—Rep. Massachusetts Bd. Health, 1916, p. 450.

ALCOHOL DEHYDRATUM.

Winkler, L. W.: Commercial "absolute" alcohol usually contains about 1 per cent of water. A method whereby this water can be removed is described.—Ztschr. angew. Chem. 1916, v. 21, p. 18.

Kubierschky, Konrad: A description of a method for obtaining a high percentage of absolute alcohol from alcohol-water mixtures with uninterrupted operation.—Pure Products, 1916, v. 12, p. 290.

ALCOHOL, METHYL (NONOFFICIAL).

Campbell, C. L.: A process for obtaining methyl alcohol and calcium acetate from the acetate liquor of wood distillation. U. S. Patent No. 1,192,987, Aug. 1.—Chem. Abstr. 1916, v. 10, p. 2402.

Szarvasy, E.: A process for preparing methyl alcohol from methyl chloride. U. S. Patent No. 1,181,697, May 2.—Chem. Abstr. 1916, v. 10, p. 1693.

Mannich and Geilmann: On the decomposition of methyl alcohol by heated copper.—Chem. Abstr. 1916, v. 10, p. 1532 from Ber. 1916, v. 49, p. 585–586.

Frary, Guy G.: A report showing the methyl alcohol content of a number of different toilet preparations.—Rep. South Dakota F. & D. Com. 1916, p. 154–162.

Fendler, G.: Rinck's method for the detection of methyl alcohol was found to be unreliable owing to the fact that methyl alcohol yields traces of formaldehyde under the conditions of the test.—Ztschr. Unters. Nahr.- Genussm. 1916, v. 30, p. 228–230 through Analyst (The), 1916, v. 41, p. 316.

Mannich, C., and Geilmann, W.: A description of a method for detecting methyl alcohol by catalytic dehydrogenation.—Chem. Zentralbl. 1916, v. 87, p. 996–997 from Archiv. Pharm. 1916, v. 254, p. 50–64.

Frankforter and Cohen: The determination of acetone in systems of methyl alcohol, water and potassium fluoride, and equilibria in systems of methyl ethyl ketone, water and inorganic salts.—J. Am. Chem. Soc. 1916, v. 38, p. 1136–1141; see also Chem. Abstr. 1916, v. 10, p. 1725.

Wulling, F. J.: A paper dealing with the danger incurred in the use of wood alcohol by those ignorant of its properties. A number of cases of poisoning is cited.—Drug. Circ. 1916, v. 60, p. 206.

Anon.: There is no reason to believe that methyl alcohol as a fuel possesses any special dangers or disadvantages. The products of its complete combustion are the same as those of the combustion of ethyl alcohol, namely, water and carbon dioxide. Two cases of poisoning attributed to wood alcohol used as a fuel are on record. These cases are probably due to the effects of incomplete combustion.—J. Am. M. Assoc. 1916, v. 66, p. 913.

ALETRIS, N. F.

Lilly, J. K.: One lot of *Chamælirium luteum*, false unicorn, was offered for *Aletris farinosa*.—Oil, Paint & Drug. Rep. 1916, v. 90, No. 16, p. 46.

ALOE.

Stacy, C. E.: A description of a new color reaction for aloes. A pink color develops when a potassium ferricyanide solution is added to an aqueous extract of Barbadoes aloes. Socotrine aloes, Cape aloes, and commercial aloin give a green color.—Analyst, 1916, v. 41, p. 75.

Scoville, W. L.: One sample of aloes examined contained no aloin.—J. Am. Pharm. Assoc. 1916, v. 5, p. 536.

ALOINUM.

Seel, E., and Kelber, C.: Data showing the molecular weight of aloin and its oxidation products as revealed by determinations made according to different methods.—Ber. deutsch. chem. Gesellsch. 1916, v. 49, p. 2364–2368.

Léger, I. E.: A report of researches on barbaloin, iso- and ἀ-barbaloin. Experiments throwing light on the structure of these compounds are described in detail.—Ann. chim. applicata, 1916, v. 6, p. 318–381.

Léger, E.: An account of researches on the preparation of isomeric acetyl derivatives of nataloin and homonataloin.—J. pharm. et chim. 1916, v. 13, p. 313–317; see also Compt. rend. acad. sc. 1916, v. 162, p. 506–508.

ALTHÆA.

Rusby, H. H.: Cut althæa, thinly coated with milk of lime, as Jamaica ginger and German calamus are treated, is of frequent appearance. It is now recognized that other drugs are adulterated when so treated, and it would seem that the same view should be taken of this drug.—J. Am. Pharm. Assoc. 1916, v. 5, p. 536.

Gutbier, A., and Weise, G. L.: An article dealing with the preparation and general properties of the colloidal solutions obtained by extracting the roots of marsh mallow.—Kolloid. Ztschr. 1916, v. 19, p. 177–191.

ALUMEN EXSICCATUM.

Vanderkleed, C. E.: Great improvement in the moisture content of burnt alum has been noted, none of the samples examined containing more than 6 per cent, which is very close to our arbitrary standard of 5 per cent moisture.—J. Am. Pharm. Assoc. 1916, v. 5, p. 536.

ALUMINI HYDROXIDUM.

Rakuzin, M. A.: A report of investigations dealing with the adsorption of albuminous substances by aluminum hydroxide. An abstract.—Pharm. J. 1916, v. 97, p. 593.

AMMONII BROMIDUM.

Beringer, George M.: The purity of bromide of ammonium has been increased from 97 per cent absolute bromide in the Eighth Revision to 98.5 per cent in the Ninth Revision.—Am. Druggist, 1916, v. 64, No. 8, p. 23.

Smith, Alexander, and Eastback, Herbert E.: A study of the allotropy, and solubility of ammonium bromide in water.—J. Am. Chem. Soc. 1916, v. 38, p. 1261–1266.

AMMONII CARBONAS.

Bueb and Deutsche Continental Gas-Ges: A process for making solid ammonium carbonate. German Patent No. 285,531, Mar. 22.—Chem. Abstr. 1916 v. 10, p. 669.

Wiebelitz: The author reports that a salt which is a true ammonium carbonate is now on the market. This new salt contains 21 per cent of NH_3 and 55.7 per cent of CO_2 and corresponds to the formula NH_4HCO_3. An abstract.—Pharm. Weekblad, 1916, v. 53, p. 1455.

Ewe, G. E.: Two lots of ammonium carbonate examined were low in NH_3 content, containing 29.15 per cent and 30.85 per cent, respectively.—Proc. Pennsylvania Pharm. Assoc. 1916.

AMMONII CHLORIDUM.

Coleman, Warren: From experiments, it is concluded that ammonium chloride facilitates expectoration and can be considered an expectorant within the definition of the term.—Am. J. Med. 1916, v. 152, p. 569–574.

AMMONII IODIDUM.

Smith, Alexander, and Eastlack, Herbert E.: Data showing the solubilities of ammonium iodide between −19° and 136° C., and the absence of a transition point.—J. Am. Chem. Soc. 1916, v. 38, p. 1500–1502.

AMYGDALA DULCIS.

Holmes, E. M.: The U. S. P. reverts to a trinomial nomenclature for sweet almond thus, *Prunus Amygdalus dulcis*, as if uncertain whether the plant should be regarded as a form or a variety.—Pharm. J. 1916, v. 97, p. 484.

AMYLUM.

Harrison, W.: A consideration of some properties of starch from a colloid-chemical point of view.—Physiol. Abstr. 1916, v. 1, p. 76.

Huizinga, Alida: Experimental data on the determination of starch by the methods of Baumert and Bode.—Chem. Weekblad, 1916, v. 13, p. 198–205.

Clementi, A.: A discussion of certain factors which exert a disturbing influence on the color reaction between starch and iodine. An abstract.—C. U. C. P. Alumni J. 1916, v. 23, p. 234.

Northrop and Nelson: A report of an investigation showing that phosphoric acid is a normal constituent of starch.—J. Am. Chem. Soc. 1916, v. 38, p. 472.

Knerr, E. B.: Raw starch, regardless of its source, is stated to be the carbohydrate food par excellence for the diabetic. The dose recommended is a rounded teaspoonful taken three or four times a day. An abstract.—J. Am. M. Assoc. 1916, v. 67, p. 979.

ANETHOL, N. F.

Anon.: Notes on the solidifying and melting point of anethol.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 46.

Anon.: A sample of Spanish anethol was found to have a melting point of 22 to 22.5° C. and a congealing point of about 21° C. Its specific gravity at 25° C. was 0.986.—Pref. & Ess. Oil Rec. 1916, v. 7, p. 82.

ANGELICÆ RADIX, N. F.

Lilly, J. K.: One lot of angelica root examined contained a high percentage of calamus.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

ANISUM.

Sayre, L. E.: A sample of anise examined was below standard. It contained insects and numerous small black seeds and an excess of stems.—Bull. Kansas Bd. Health, 1916, p. 10.

ANTIMONII ET POTASSII TARTRAS.

Anon.: Tartar emetic and sodium bicarbonate mixed in aqueous solution precipitate on standing. The sediment formed is probably antimony hydroxide.—Rep. Chem. Lab. Am. M. Assoc. 1916, v. 9, part 2, p. 18–19.

Rogers, Sir Leonard, and Hume. N. H.: A report on the treatment of kala-azar by intravenous injections of tartar emetic and by inunctions of metallic antimony.—Brit. M. J. 1916, v. 1, p. 301–303.

Castellani, Aldo: Tartar emetic is stated to be efficacious in the treatment of various protazoal diseases. Its efficacy in the treatment of trypanosomiasis has been proven and it may be considered a specific in kala-azar, and oriental sore. It is also useful in the treatment of yaws.—Brit. M. J. 1916, v. 2, p. 552.

ANTIMONIUM SULPHURATUM, N. F.

Hutin, A.: A description of a rapid method for the testing of commercial sulphide of antimony.—Ann. chim. analyt. 1916, v. 21, p. 3–7.

E'we, G. E.: One lot labeled "Antimony, black sulphuretted" was a mixture of powdered marble and lampblack.—Proc. Pennsylvania Pharm. Assoc. 1916.

ANTIPYRINA.

François, Maurice: From experiments, it is concluded that titration with an alcoholic solution of iodine in the presence of mercuric chloride is more accurate than the method for the determination of antipyrine given in the Ph. Fr.—Ann. Falsif. 1916, v. 9, p. 459–464.

Finnemore, H., and Colverd, J.: A note on the incompatibility of antipyrine with sodium salicylate and magnesium sulphate. An abstract.—C. U. C. P. Alumni J. 1916, v. 23, p. 187.

APII FRUCTUS, N. F.

Alsberg, C. L.: The tentative standards laid down by the Bureau of Chemistry require that the material shall yield not less than 95.0 per cent of sound seed, not less than 2.0 per cent of volatile oil, and not more than 10 per cent of ash.—S. R. A.—Chem. 1916, No. 16, p. 30.

APOCYNUM, N. F.

Trier, G.: A discussion of the properties of cymarine from Canadian hemp and its relation to the heart poisons.—J. pharm. et chim. 1916, v. 13, p. 105–110.

APOMORPHINÆ HYDROCHLORIDUM.

Anon.: When dispensing apomorphine hydrochloride in solution, all trace of alkali should be removed from the bottle. The faintest trace of alkali causes the solution to turn green.—Bull. Pharm. 1916, v. 30, p. 214.

Francis, J. M.: Apomorphine is very unstable and inevitably undergoes decomposition whether dispensed in the form of an ordinary powder or in tablets.—Am. Food J. 1916, v. 11, p. 409.

De La Paz, Daniel, and Garcia, Faustino: An experimental study on the use of apomorphine to remove foreign bodies from the respiratory passages.—Philippine J. Sc. 1916, v. 11, sec. b, p. 51–59.

AQUA.

G. J. v. M.: A review of a volume by J. Tillmans on the chemical examination of potable waters and those employed in manufacturing processes.—Chem. Weekblad, 1916, v. 13, p. 1028.

Tillmans, J., and Mildner, H.: Directions for the testing of water intended for use in the preparation of salvarsan.—Chem. Abstr. 1916, v. 10, p. 1402 from Ztschr. angew. Chem, 1915, v. 28, p. 469–474.

Goester, L. E.: Notes on the analysis of potable waters.—Pharm. Weekblad, 1916, v. 53, p. 1345–1360.

Trillat, M.: A note on the use of red wine by the Romans for determining the alkalinity of water.—Chem. & Drug. 1916, v. 88, p. 725.

Dhommée, René: A comparative study of the methods for determining the alkalinity of water.—Bull. sc., pharmacol. 1916, v. 23, p. 92–97.

Wagenaar, M.: A description of a short method for the determination of alkalies in potable water, accompanied by data obtained in a number of analyses.—Pharm. Weekblad, 1916, v. 53, p. 232–238.

Kay, S. A., and Newlands, Susan H.: A report of experiments on the determination of the hardness of natural waters.—J. Soc. Chem. Ind. 1916, v. 35, p. 445–447.

Norton and Knowles: A study of the indicators suitable for the determination of temporary hardness in water.—J. Am. Chem. Soc. 1916, v. 38, p. 877–884; see also Chem. Abstr. 1916, v. 10, p. 1565.

Kolthoff, I. M.: Notes on the quantitative determination of small quantities of metals in potable water.—Pharm. Weekblad, 1916, v. 53, p. 1739–1749.

Le Roy, G.-A.: The determination of free chlorine in water supplies.—Compt. rend. acad. sc. 1916, v. 162, p. 327–329; see also Chem. Abstr. 1916, v. 10, p. 1564.

Kolthoff, I. M.: Data showing the influence of neutral salts on the ionization constant of water.—Chem. Weekblad, 1916, v. 13, p. 1150.–1156.

Carles, P.: A note on the presence of ammonium salts in artesian water.— Répert. pharm. 1916, v. 28, part 1, p. 65–66.

Race, Joseph: Experimental data on the making of bacterial counts in the examination of water.—Am. J. Public Health, 1916, v. 6, p. 488–496.

Schweiz: A description of a method for the detection of *bacillus coli* in water.—Yearbook of Pharmacy, 1916, p. 77, from Apoth.-Ztg. 1916, v. 54, p. 194.

Smith, Alden E.: Water as a therapeutic agent.—J. Am. Inst. Homeopathy, 1916, v. 8, p. 1159–1162; see also Chem. Abstr. 1916, v. 10, p. 1554.

Colin, H.: A study of the sterilization of water by means of carbon dioxide under pressure. An abstract.—Apoth.-Ztg. 1916, v. 31, p. 652.

Golse, J.: A description of a method for controlling the degree of purification of water by javellization after the active chlorine has been eliminated with sodium hyposulphite.—J. pharm. et chim. 1916, v. 14, p. 8–13.

Comte: A description of some proposed improvements in the method of javellization of drinking water.—J. pharm. et chim. 1916, v. 14, p. 261–263.

Anon.: A description of a field water purification plant.—Chem. Abstr. 1916, v. 10, p. 1063 from Can. Engr. 1916, v. 10 p. 189–190.

AQUÆ.

Thum, John K.: A description of a method for making medicated waters. The method consists principally in dissolving the oil in distilled water by agitation without the addition of the usual agents employed for the purpose of assisting in the subdivision of the oil.—J. Am. Pharm. Assoc. 1916, v. 5, p. 736–737.

Guyote, René: Experimental data showing the effect of oxygen and oxidizing agents, reducing agents, light, electricity, antiseptics, certain metals, etc., upon the color of distilled aromatic waters with special reference to orange flower water.—J. pharm. et chim. 1916, v. 13, p. 37–46.

Pinilla, H. Rodriguez: A short article enumerating and describing the purgative mineral waters of Spain.—Farm. Espan. 1916, v. 48, p. 599–601.

AQUA AMMONIÆ.

Foxwell, G. E.: A description of a colorimetric method for the estimation of ammonia. The method is based on the color produced by an excess of phenol and a little sodium hypochlorite.—Chem. Eng. 1916, v. 23, p. 182.

Woelk: A description of a method for the detection of pyridine in ammonia water. The method is based on the production of an

empyreumatic odor when an ammonium salt containing pyridine is triturated with borax. An abstract.—Drug. Circ. 1916, v. 60, p. 146.

Hilpert, S.: A description of the picrate method for the determination of naphthalene in ammonia water. An abstract.—Pharm. J. 1916, v. 96, p. 525.

Engfeldt, N. O.: Methods for the detection of tarry substances in ammonia.—Svensk. farm. Tidskr. 1916, v. 20, p. 237.

AQUA AMMONIÆ FORTIOR.

Scoville, Wilbur L.: It is fortunate that the pharmacist seldom or never has a call for stronger ammonia water for medicinal use as agitation or a very moderate degree of heat soon reduces the strength to 25 per cent or less.—Bull. Pharm. 1916, v. 30, p. 362.

AQUA AURANTII FLORUM.

Guyot, René: Notes on the color changes which take place in distilled waters, especially orange flower water.—J. pharm. et chim. 1916, v. 13, p. 37–46; see also Chem. Abstr. 1916, v. 10, p. 1575.

AQUA CHLOROFORMI.

Anon.: A suggested recipe for the preparation of a mentholated chloroform water.—C. U. C. P. Alumni J. 1916, v. 23, p. 12.

AQUA CREOSOTI.

Dickman, George C.: The reason for retaining creosote water in the U. S. P. is not apparent. The quantity of creosote which it contains is so small that it is of no value medicinally and its use as a vehicle will hardly be justified or recommended.—Pract. Drug. 1916, v. 34, No. 10, p. 25.

AQUA DESTILLATA.

Tillmans, Mildner: On the testing of distilled water intended to be utilized for the preparation of solutions of salvarsan. A review of the reagents and tests to be applied.—Südd. Apoth.-Ztg. 1916, v. 56, p. 2–3.

E'we, G. E.: One lot of distilled water examined yielded 0.0956 gm. residue upon evaporation of 100 cc., while the U. S. P. limit is 0.05 gm. It was otherwise U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 118.

AQUA HAMAMELIDIS.

Lythgoe, Hermann C.: Of nine samples of hamamelis water examined, one was adulterated.—Rep. Massachusetts Bd. Health, 1916, p. 450.

Tice, William G.: Of 31 samples of hamamelis water examined, 3 were below standard.—Rep. New Jersey Dept. Health, 1916, p. 72.

Hostmann, Jeannot: Two of the 10 samples of extract of witch-hazel examined were low in alcohol content.—Proc. New Jersey Pharm. Assoc. 1916, p. 77.

ARALIA, N. F.

Anon.: Information relative to the cultivation and harvesting of spikenard is given.—N. A. R. D. J. 1916, v. 22, p. 1024.

ARGENTI NITRAS.

Bridgman, P. W.: An investigation of the polymorphic changes taking place in the univalent nitrates under pressure.—Chem. Abstr. 1916, v. 10, p. 1955, from Proc. Am. Acad. Arts Sci. 1916, v. 51, p. 581–625.

Ramond: A report on the use of silver nitrate as a local application for the treatment of Vincent's angina.—Yearbook of Pharmacy, 1916, p. 247, from Progrès Méd 1916, v. 32, p. 35.

ARGENTI NITRAS FUSUS.

Anon.: A new form of fused silver nitrate is being introduced in Germany. It consists of glass rods on which a small amount of silver nitrate has been fused. It is said that these caustic rods are an improvement over the formerly used glass rods which were merely dipped into a strong solution of silver nitrate.—Südd. Apoth.-Ztg. 1916, v. 56, p. 72.

ARGENTUM (NONOFFICIAL COMPOUNDS).

Wastenson, Hugo: Data obtained in the analysis of protein compounds of silver—Svensk farm. Tidskr. 1916, v. 20, p. 57–62; see also Pharm. Post, 1916, v. 49, p. 187–188; Chem. Abstr. 1916, v. 10, p. 1773–1774.

Vanderkleed, C. E., and E'we, G. E.: A description of a method for the determination of potassium in colloidal silver preparations.—J. Am. Pharm. Assoc. 1916, v. 5, p. 715–716.

Anon.: Comments on the methods for the asay of collargol and protargol as given in the supplement to the Ph. Ndl. IV.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 340.

Robinson, W. J.: A note on the incompatability of argyrol with iodine. An abstract.—Drug. Circ. 1916, v. 60, p. 337.

Edwards, E. Gard.: Stains of argyrol on the hands or clothing can be readily removed by rubbing with a salted grease, such as bacon grease, followed by soap and water.—J. Am. M. Assoc. 1916, v. 66, p. 592.

ARSENI TRIOXIDUM.

Editorial: The toxicity of arsenous and arsenic acids. The relatively greater toxicity of arsenous in comparison with arsenic acid is in the proportion of 10:6 in the case of the lethal dose required for intravenous injection in animals. Perfusion experiments with the isolated frog's heart indicate that the arsenous compounds are 300 times as harmful as those of arsenic acid.—J. Am. M. Assoc. 1916, v. 66, p. 579–580.

Joachimoglu, G.: An experimental study of the development of tolerance for arsenic.—Pharm. Post, 1916, v. 49, p. 107–108, 119–121; see also Arch. exper. Path. u. Pharmakol. 1916, v. 79, p. 419–442; Chem. Abstr. 1916, v. 10, p. 1680.

Anon.: An editorial discussing the mechanism by which the organism acquires tolerance for arsenic.—J. Am. M. Assoc. 1916, v. 67, p. 621–622.

ARSENIC (NONOFFICIAL COMPOUNDS).

Karrer, P.: A paper giving the origin, history, and therapeutic uses of organic arsenic compounds, and discussing the merits of certain methods for the preparation of these compounds.—Chem. Zentralbl. 1916, v. 1, p. 1088.

Moore, Benjamin: The history of organic compounds of arsenic in the treatment of protozoan diseases.—Brit. M. J. 1916, v. 1, p. 616–618.

Kahn, Joseph: The organic compounds of arsenic. A general review of their chemical constitution.—Proc. New York Pharm. Assoc. 1916, p. 142–152.

de M. Abad, Mariano: On the derivatives of arsenobenzol. A general discussion.—Farm. Espan. 1916, v. 48, p. 97–99, 113–117, 129–132.

Burroughs Wellcome & Co.: A note on the arsenic content of salvarsan and neosalvarsan. Also on kharsivan and neokharsivan.—Brit. M. J. 1916, v. 2, p. 201–202.

Engelhardt and Winters: A method for the estimation of atoxyl.—Chem. Abstr. 1916, v. 10, p. 804 from J. Am. Pharm. Assoc. 1915, v. 4, p. 1468–1471.

Danysz, J.: A report on the bad effects observed after the injection of products of the arsenobenzol group, and on the anaphylactic crises.—Compt. rend. acad. sc. 1916, v. 163, p. 246–248.

Danysz, J.: A discussion of the causes of intolerance to the arsenobenzenes and the methods for avoiding or preventing it.—Compt. rend. acad. sc. 1916, v. 163, p. 535–538.

Danysz: The compound "arsenol-bromo-argentique" is designated as No. 88. The compound "sulphate of dioxy-diamino-arseno-benzo-

late of silver bromide and antimonyl" is designated as No. 102. Both of these compounds are said to be useful in the treatment of trypanosomiases.—Répert. Pharm. 1916, v. 28, part 1, p. 16–17, from Compt. rend. acad. sc. Aug. 24, 1914.

Bonard, N. S.: A discussion of the chemistry, posology, and administration of luargol—a new remedy for syphilis.—Lancet, 1916, v. 191, p. 554–558.

Anon.: Dalimer and Levy-Franckel report that they have obtained favorable results in the treatment of syphilis by the injection of Danysz's arseno-antimony-silver compound, "102," or "Luargol." No attempt was made to study the effect of this substance on the course of the disease, the investigation having been limited to the curing of the lesions.—Pharm. J. 1916, v. 96, p. 423, from Compt. rend. acad. sc. 1916, v. 162, p. 440.

Anon.: Danysz, of the Pasteur Institute, two years ago directed attention to the value of two compounds of arsenobenzol, one in combination in silver bromide, the other, which he called "102," an arsenobenzol-silver bromide-antimonyl compound. The results obtained in the treatment of 550 cases of syphilis were most satisfactory. In 80 per cent of the cases treated the injection of 100 to 120 centigrams of "102" resulted in a negative blood test two months after treatment.—Pharm. J. 1916, v. 96, p. 77, from Compt. rend. acad. sc. 1915, v. 161, p. 685.

Renault, Fournier, and Guénot: Notes on the treatment of syphilis with "arsenobenzol bromo-argentique antimonié."—Répert. Pharm. 1916, v. 28, part 1, p. 17–18, from Compt. rend. acad. sc. Nov. 29, 1915.

Dudley, Sheldon F.: An account of an experience with galyl at the Royal Naval Hospital, Chatham.—Lancet, 1916, v. 191, p. 59–60.

Anon.: Venarsen and other preparations of the Intravenous Products Co. Vernarsen was found to be a simple solution containing, sodium cacodylate with mercuric iodide and sodium iodide.—J. Am. M. Assoc. 1916, v. 66, p. 978.

Trimble, William B., and Rothwell, John J.: A comparative study of salvarsan and neosalvarsan in the treatment of syphilis.—J. Am. M. Assoc. 1916, v. 67, p. 1984–1987.

Ormsby, O. S., and Mitchell, J. H.: The new supply of salvarsan and neosalvarsan is stated to be distinctly more toxic than that formerly obtained from Germany. A striking increase in the number of severe reactions following injections of these preparations has been observed.—J. Am. M. Assoc. 1916, v. 67, p. 1756.

Pearce, Louise, and Brown, Wade H.: Chemopathological studies with compounds of arsenic. IV. Investigations to determine the character and distribution of renal injury produced by arsenicals as indicated by the process of repair.—J. Exper. M. 1916, v. 23, p. 443–459.

Neosalvarsan.—Moody, A. M.: A report of undesirable symptoms following the injection of neosalvarsan.—J. Am. M. Assoc. 1916, v. 67, p. 1757.

Beine, René: A report of a case of exfoliative dermatitis following neosalvarsan injections.—Boston M. & S. J. 1916, v. 175, p. 96–99.

Salvarsan.—Schamberg, Jay F., et al.: A report on the therapeutic effect of the administration of arsenobenzol by mouth. Experiments showed that administration by mouth is capable of producing a curative influence on the lesions of syphilis, but the authors do not advise its use in this manner, inasmuch as there are more efficient avenues of administration.—J. Am. M. Assoc. 1916, v. 67, p. 1919–1923.

Frayton, Frank A.: A description of a simplified procedure for the administration of salvarsan, including illustrations of the apparatus employed.—J. Am. M. Assoc. 1916, v. 66, p. 1921–1922.

Engwer: From experiments, it is concluded that the rate of excretion of salvarsan in the urine is no indication of the value of the methods of administration.—Deutsch. med. Wchnschr. 1916, v. 42, p. 1195–1196.

Sieburg, E.: A study of the decomposition products of salvarsan as they appear in the urine.—Physiol. Abstr. 1916, v. 1, p. 495 from Ztschr. physiol. Chem. 1916, v. 97, p. 53–108.

Willcox, W. H., and Webster, J.: Researches on the toxicity of salvarsan. A number of chemical tests for the identification of the latter are given.—Brit. M. J. 1916, v. 1, p. 173–178; see also Analyst (The), 1916, v. 41, p. 231–240.

Puckner, W. A.: A copy of the report of the council of pharmacy and chemistry of the American Medical Association on arsenobenzol (Dermatological Research Laboratories, Philadelphia Polyclinic) and diarsenol (Synthetic Drug Co.).—J. Am. M. Assoc. 1916, v. 67, p. 879.

Anon.: Fictitious neosalvarsan was found on examination to consist of ordinary table salt colored yellow with naphthol yellow S.—D.-A. Apoth.-Ztg. 1916, v. 36, p. 172.

Anon.: Notes on deaths following the administration of salvarsan.—Deutsch. med. Wchnschr. 1916, v. 42, p. 106–107.

Ellis, John D.: The author reports that toxic symptoms were noticed in the great majority of cases in which salvarsan, purchased during the last three months, was administered.—J. Am. M. Assoc. 1916, v. 67, p. 1757.

Anon.: Under the caption "London letter," it is stated that the many fatalities following the administration of salvarsan indicate that the latter is not a safe drug. Furthermore, that the same applies to its substitutes.—J. Am. M. Assoc. 1916, v. 67, p. 1030.

Lewitt, M.: A confirmation and elaboration of the statement of Stern concerning the excretion of salvarsan after intravenous injection of concentrated solution.—Chem. Zentralbl. 1916, v. 11, p. 1173.

Bland-Sutton, Sir John: A report of a case of arsenic cancer.—Brit. M. J. 1916, v. 2, p. 788–789.

Levison, Louis A.: In a discussion of the results of the treatment of arterial hypertension due to or associated with syphilis, it is stated that the careful use of mercury or salvarsan has not produced bad effects on kidneys damaged by arterial disease.—J. Am. M. Assoc. 1916, v. 67, p. 730–733.

Potter, Nathaniel Bowditch: A clinical study of the effect of salvarsan in the treatment of double infections, tuberculosis and syphilis.—Am. J. M. Sc. 1916, v. 152, p. 823–845.

King, John T.: A report of cases showing the quantitative effect of salvarsan on the Wassermann reaction of the blood.—J. Am. M. Assoc. 1916, v. 67, p. 1669–1671.

Douglas, S. R., and Colebrook, L.: Experimental observations on the bactericidal power acquired by the serum after the administration of salvarsan or neosalvarsan.—Lancet, 1916, v. 190, p. 181–183.

Ormsby and Mitchell: In its uniform and nontoxic action, arsenobenzol commends itself as a remedial agent of great value in the treatment of syphilis, and its successful preparation marks an achievement in American chemotherapy. While a sufficient experience has not as yet been had from which to draw ultimate conclusions, we believe its therapeutic accomplishments, together with its safety of administration, recommend its continued employment.—J. Am. M. Assoc. 1916, v. 66, p. 867–868.

Wile, U. J.: A report on the efficiency and nontoxicity of arsenobenzol. An analyses of 243 cases of syphilis treated at the University Hospital, Ann Arbor, is included.—J. Am. M. Assoc. 1916, v. 66, p. 1880.

Anon: "Diarsenol," a substitute for salvarsan, is being manufactured in Canada under the patronage of the University of Toronto.—J. Am. M. Assoc. 1916, v. 66, p. 590.

Gardner, James A.: In a discussion of the comparative values of salvarsan and diarsenol, it is stated that the same care, in preparation and technic, in intravenous injections, should be observed with the latter as with the former.—J. Am. M. Assoc. 1916, v. 66, p. 1303–1304.

Cook, Abner H.: In a report on a case in which alarming symptoms followed the administration of diarsenol, the following are

offered as possible causes: The presence of a chemical poison acting direct or through the suprarenals on the vasomotor center, or surgical or anaphylactic shock.—J. Am. M. Assoc. 1916, v. 66, p. 865–866.

Likes, Sylvan H., and Schoenrich, Herbert: A report of a case of syncope immediately after the administration of diarsenol.—New York M. J. 1916, v. 104, p. 64–66.

Lucey, H. C.: A discussion of the therapeutics and reaction effects of kharsivan.—Brit. M. J. 1916, v. 1, p. 614–617.

For additional references on organic compounds of arsenic see Index Med.; Physiol. Abstr.; Brit. M. J.; J. A. M. A.; and Chem. Abstr.

ASAFŒTIDA.

Schneider, Albert: It is impossible to obtain the pharmacopœial ash standard (30 per cent) for asafetida without adulterating the drug heavily with sand, clay, diatomaceous earth, dirt, or perhaps a very high percentage of vegetable matter rich in silica, as gramineous chaff.—Drug. Circ. 1916, v. 60, p. 693.

Rusby, H. H.: It is unfortunate that advantage has not been taken of the methods worked out in the New York Laboratory of the Department of Agriculture for the identification of the resin of asafetida. At the time that these methods were proposed their accuracy was challenged by certain British authorities, but their objections have been completely discredited since.—Drug. Circ. 1916, v. 60, p. 538.

Howard, Charles D.: A sample of asafedita examined contained approximately 65 per cent of mineral matter; its solubility in alcohol was but 33.65 per cent.—Bull. New Hampshire Bd. Health, 1916, v. 4, Nos. 7–8, p. 129.

Vanderkleed, C. E.: Two samples of asafetida examined yielded 61.9 and 59 per cent, respectively, of alcohol-soluble matter: 13.1 and 22.5 per cent of ash.—J. Am. Pharm. Assoc. 1916, v. 5, p. 536.

Scoville, W. L.: Six lots of asafetida examined ranged from 36 per cent soluble in alcohol to 77.3 per cent. The ash content ranged from 2.06 to 40 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 536.

Patch, E. L.: Of four samples of asafetida examined, the alcohol-soluble material therein varied from 51 to 65 per cent, the ash content from 11 to 18 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 536.

Roberts, J. G.: Of the six samples of asafetida examined, only two were of U. S. P. quality. The others contained insufficient amounts of alcohol-soluble matter and yielded an excess of ash.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 109.

Swift, E. G.: Eleven lots of asafetida examined ranged from 32.76 per cent to 76.4 soluble in alcohol. Eight samples contained more

than 64 per cent of material soluble in alcohol, and, with one exception, less than 8 per cent of ash. The lowest ash content was 4.58 per cent.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

ASCLEPIAS, N. F.

Anon.: Information relative to the cultivation and harvesting of pleurisy root is given.—N. A. R. D. J. 1916, v. 22, p. 1173–1174.

Hart, Fannie: A comparison of the histological characters of *Asclepias tuberosa* and two of its substitutes, *Asclepias decumbens* and *Asclepias syriaca*.—Proc. New York Pharm. Assoc. 1916, p. 274–278; see also Pract. Drug. 1916, v. 34, No. 8, p. 30–31.

ASPIDIUM.

Lilly, J. K.: Five lots of aspidium examined consisted of fern rhizomes of other species; two lots were old and unsatisfactory. It was difficult to procure good aspidium throughout the year.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

ASPIDOSPERMA.

Holmes, E. M.: Quebracho blanco is used as a specific name, without a hyphen thus: *Aspidosperma quebracho blanco* Schlechtendahl, suggesting when compared with *Prunus Amygdalus dulcis*, that blanco is the name of a form or variety of *Aspidosperma Quebracho*.—Pharm. J. 1916, v. 97, p. 484.

Anon.: Aspidosperma was in the 1890 U. S. P. and its reintroduction is surprising in view of its limited use.—Drug Topics, 1916, No. 9, p. 6.

Vanderkleed, C. E.: The alkaloidal content of the two samples of quebracho examined was 0.95 and 1.22 per cent, respectively.—J. Am. Pharm. Assoc. 1916, v. 5, p. 543.

Anon.: The alkaloidal content of one sample of quebracho assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

ATROPINA.

Anon.: A note on the preparation of atropine from *Datura alba* collected in the Philippines.—Pharm. J. 1916, v. 97, p. 297.

Eder, R.: Descriptions of reactions for the identification of atropine and the closely related mydriatic alkaloids.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 501–501, 517–520, 534–537, 544–548, 560–563, 609–612, 621–624, 657–661, 669–670, 685–687, 717–719.

Zellweger, R.: From experiments, it is concluded that the odor test of the Ph. Helv. IX for atropine fails with a 3 per cent aqueous solution of chromic acid, but gives results if the atropine is mixed in a

dry test tube with chromium oxide and heated in a small flame until white fumes appear.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 612.

Jensen, H. R.: On account of the shortage of atropine, it is suggested that lævo-hyoscyamine be used in its stead, as the latter has a mydriatic power 1.85 times as great.—Lancet, 1916, v. 191, p. 797.

Eggleston, C.: A report of investigations relative to the antagonism between atropine and certain central emetics.—J. Pharmacol. & Exper. Therap. 1916, v. 9, p. 11–25.

Sutpehn, T. Y.: A report of an unusual complication in a case of glaucoma due to atropine.—New York M. J. 1916, v. 103, p. 1075.

McGuigan, Hugh: A study of the influence of atropine and pilocarpine on the glycogenic function.—J. Pharmacol. & Exper. Therap. 1916, v. 8, p. 407–415.

Marris, H. F.: On the use of atropine as an aid to the diagnosis of typhoid and paratyphoid A and B infections.—Brit. M. J. 1916, v. 2, p. 717–720.

Zunz and Tysebaert: A study of the action of atropine sulphate on the isolated stomach and bowel of the dog.—J. Pharmacol. 1916, v. 8, p. 325–337; see also J. Am. M. Assoc. 1916, v. 67, p. 152; Chem. Abstr. 1916, v. 10, p. 2003.

AURANTII AMARI CORTEX.

Holmes, E. M.: The name chosen for the bitter orange in the Ph. Brit. appears to be preferable, viz, *Citrus Aurantium*, var. *Bigaradia*, Hook, f.—Pharm. J. 1916, v. 97, p. 484.

AURI ET SODII CHLORIDUM.

Vanino, L., and Hartwagner, F.: A discussion of an iodometric determination of gold, with a description of a new method evolved by the author.—Ztschr. anal. Chem. 1916, v. 55, p. 377–388.

BALSAMUM PERUVIANUM.

Holmes, E. M.: The choice of the botanical name *Toluifera Pereirae* seems incongruous, since the generic name *Toluifera* means tolu bearer, which obviously this plant is not. The Ph. Brit. name, *Myroxylon Pereirae*, is evidently more appropriate.—Pharm. J. 1916, v. 97, p. 484.

Umney, J. C.: The limits of specific gravity for balsam Peru, 1.130 to 1.160 at 25° C., are too liberal. Samples of the true balsam fall within the specific gravity limits of 1.135 to 1.155 at 25° C.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 345.

Umney, J. C.: Although the Ph. Brit. limits of specific gravity 1.140 to 1.158 include nearly all pure samples of Peru balsam, an

occasional sample may be found as low as 1.135.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 249.

Patch, E. L.: In answer to a criticism of a lot of balsam of Peru examined, a leading importer stated that although he handled about 60 per cent of the country's total importation, and tested every parcel that he received, he very rarely, in fact practically never, found any balsam that was strictly U. S. P.—J. Am. Pharm. Assoc. 1916, v. 5, p. 536.

Schimmel & Co.: Adulteration of a sample of balsam of Peru that answered the requirements of the Ph. Germ. was detected by its solubility in dilute alcohol. The pure balsam forms a clear solution, only, with equal parts of 90 per cent alcohol.—D.-A. Apoth.-Ztg. 1916, v. 37, p. 129.

E'we, G. E.: One lot of balsam of Peru examined contained excessive acid resins.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 116.

BALSAMUM TOLUTANUM.

Holmes, E. M.: The name *Toluifera Balsamum*, is unsuitable, as it indicates that it is the balsam-bearing *Toluifera*, as if no other species of *Toluifera* yielded any balsam. The Ph. Brit. name, *Myroxylon Toluiferum*, appears to be preferable.—Pharm. J. 1916, v. 97, p. 484.

BELLADONNÆ FOLIA.

Sievers, Arthur F.: The possibility of improving the commercial belladonna crop through selection.—Am. J. Pharm. 1916, v. 88, p. 193–215; see also Chem. Abstr. 1916, v. 10, p. 1691.

Arny, L. Wayne: A short article on the cultivation of medicinal plants, dealing principally with the cultivation of belladonna.—Drug. Circ. 1916, v. 60, p. 597–801.

Wilson, J. Beetham: The results of experiments conducted by an English pharmacist on the cultivation of belladonna on waste lands of England.—Chem. & Drug. 1916, v. 88, No. 1905, p. 772–773.

Vaytte: Notes on the cultivation of belladonna near Petrograd, Russia. These plants were found to contain principally hyoscyamine and only traces of atropine.—J. pharm. et chim. 1916, v. 14, p. 112–113; see also Répert. pharm. 1916, v. 28, part 1, p. 327 from Pharmazevtizeski J. 1916, p. 169.

Kilmer, Fred B.: A short description of the chemical and physiological properties of the alkaloids of *Amaryllis belladonna*.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1202–1204.

Johannessen: A comparison of the methods of the Swiss, German, and Norwegian pharmacopœias for the evaluation of belladonna and hyoscyamus leaves. An abstract.—Pharm. Ztg. 1916, v. 61, p. 116.

van Itallie, L.: Notes on the determination of the alkaloids in belladonna leaves and belladonna extract.—Pharm. Weekblad, 1916, v. 53, p. 1664–1667.

Dean, Harold: Of late belladonna leaves have been much adulterated with the leaves of poke root, scopola or ailanthus, 20 to 80 per cent of these materials having been found therein.—J. Am. Pharm. Assoc. 1916, v. 5, p. 537.

E'we, G. E.: A sample of a drug closely resembling belladonna was free from alkaloids.—Proc. Pennsylvania Pharm. Assoc. 1916.

Table showing reported variation in alkaloidal content of belladonna leaves.

Reporters.	Number of samples—		References.
	Above standard.	Below standard.	
J. K. Lilly		1	Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.
E. L. Patch	3	0	J. Am. Pharm. Assoc. 1916, v. 5, p. 536.
J. G. Roberts	18	0	Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.
E. G. Swift	6	0	Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.
C. E. Vanderkleed	2	1	J. Am. Pharm. Assoc. 1916, v. 5, p. 536.

Joll, Mary E.: A report on three cases of belladonna poisoning.—Lancet, 1916, v. 191, p. 647.

BELLADONNÆ RADIX.

Schneider, Albert: The diameter for belladonna starch granules is given as "0.003 to 0.030 mm." (3 to 30 microns), whereas none measure over 18 microns in diameter. If the measurements given have reference to the compound starch granules, rather than to the single or simple granules, it should have been so stated.—Drug. Circ. 1916, v. 60, p. 692.

Schneider, Albert: In tests for the identification of belladonna root, the U. S. P. does not mention the distinctly eccentric position of the hilum in the starch granules.—Drug. Circ. 1916, v. 60, p. 693.

Vanderkleed, C. E.: The seven samples of belladonna root examined showed an alkaloidal content of 0.121 to 0.640 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 537.

Anon.: The mydriatic alkaloidal content of one sample of belladonna root assayed was below standard.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

BENZALDEHYDUM.

Umney, J. C.: The U. S. P. IX method for the determination of benzaldehyde gives low results. The end point with methyl orange is not sharp and the method can not be considered satisfactory.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 344.

Wastenson, Hugo: A note on the adulteration of benzaldehyde.—Svensk farm. Tidskr. 1916, v. 20, p. 515.

Roberts, J. G.: One shipment of benzaldehyde examined proved to be of inferior quality. It failed to comply with the U. S. P. specific gravity and boiling point requirements, and was only partly soluble in a solution of sodium bisulphite.—Proc. Pennsylvania Pharm. Assoc. 1916.

BENZENE.

Anon.: An extract from a paper written by Michael Faraday in 1825 telling of the discovery of benzene.—Chem. & Drug. 1916, v. 88, p. 773.

Spielman, Percy E.: Descriptions of methods for the determination of benzene, toluene, paraffin, and carbon disulphine in commercial benzoles.—Chem. & Drug. 1916, v. 88, p. 68.

Meldrum, Robert: An account of studies dealing with the vagaries of benzene during solidification and fusion. The average solidifying point was found to be 5.6° C. and the average melting point 5.7° C.—Chem. News, 1916, v. 113, p. 267.

Editorial: The toxicology of benzene. A growing source of danger lies in the inhalation of benzene vapors.—J. Am. M. Assoc. 1916, v. 66, p. 432.

Barry and Ketcham: From a study of the literature and from their experience with one case the authors conclude that benzene is a valuable remedy in the treatment of chronic myeloid leukemia, provided there are no complications and the disease is not of too long duration.—J. Am. M. Assoc. 1916, v. 67, p. 904.

BENZINUM PURIFICATUM.

Rittman, Dutton, and Dean: A paper on the manufacture of gasoline and benzene-toluene from petroleum and other hydrocarbons.—Chem. Abstr. 1916, v. 10, p. 1425 from Bull. U. S. Bur. of Mines, 1916, No. 114, p. 1–268.

Anon.: Poisoning from inhalation of benzine. Fatal cases are said to be rare. Persons vary in susceptibility to the toxic effects of benzine. Women are said to be more susceptible than men.—J. Am. M. Assoc. 1916, v. 66, p. 209.

Editorial: Hazards in handling gasoline. A review of the available literature for 1913 shows that 1,040 persons were burned to death and 3,120 persons injured in the United States alone due to carelessness in handling gasoline.—J. Am. M. Assoc. 1916, v. 66, p. 362–363.

BENZOINUM.

Holmes, E. M.: In a paper discussing the source of Siam benzoin, it is stated that apparently the pharmacopœial authorities of the United States do not accept the published botanical source of Siam

benzoin (*Styrax tonkinense*, Craib), (Pharm. J. ser. 4, v. 37, p. 804), as it is ignored under the botanical source of benzoin, of which the Siam, as well as the Sumatra, kind is official.—Pharm. J. 1916, v. 97, p. 484.

Rordorff, H.: From an examination of fruits believed to yield Siam benzoin, it is concluded that the true source of this variety should still be regarded as *Styrax tonkinese*.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 585–588.

E'we, G. E.: Three lots of benzoin examined failed to meet the U. S. P. requirement of 75 per cent soluble in alcohol. They were 70.5 per cent, 70.7 per cent, and 72.1 per cent, respectively.—Proc. Pennsylvania Pharm. Assoc. 1916.

Roberts, J. G.: A five-case lot of benzoin examined proved to be of unsuitable quality, containing only 60.75 per cent of alcohol-soluble matter.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 110.

Scoville, W. L.: Six lots of gum benzoin examined yielded 78 to 87.3 per cent of alcohol-soluble constituents.—J. Am. Pharm. Assoc. 1916, v. 5, p. 537.

Vanderkleed, C. E.: Five lots of gum benzoin examined ranged between 67.8 and 76.5 per cent in alcohol-soluble matter and yielded 0.96 to 1.62 per cent of ash.—J. Am. Pharm. Assoc. 1916, v. 5, p. 537.

BENZOSULPHINIDUM.

Klostermann, M., and Scholta, K.: A method for the detection and estimation of saccharin in the presence of other substances is described.—Ztschr. Unters. Nahr-Genussm. 1916, v. 31, p. 67–68, through Analyst (The), 1916, v. 41, p. 309–310.

E'we, G. E.: Two lots of saccharin examined contained 0.22 per cent and 0.5 per cent of ash, respectively, but were otherwise U. S. P. One lot was the sodium salt, and another lot labeled "crystal saccharin" was also the sodium salt.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 117.

BERBERIS, N. F.

Anon.: A short note giving information relative to the cultivation of Oregon grape in America.—N. A. R. D. J. 1916, v. 21, p. 215.

BETAEUCAINE HYDROCHLORIDUM.

Orr, T. G.: A report of a case of betaeucaine poisoning, with references to six cases of betaeucaine intoxication found in the literature.—J. Am. M. Assoc. 1916, v. 66, p. 1857.

BETANAPHTHOL.

Stortenbeker, W.: Notes on the crystal forms of the two naphthols.—Chem. Abstr. 1916, v. 10, p. 1645, from Ztschr. Kryst. Min. 1916, v. 55, p. 373–374; see also H. Steinmetz, ibid. p. 373–376.

Denigès, G.: Notes on the use of sulphotitanic acid as a reagent for distinguishing between α- and β-*naphthol*.—Ann. chim. analyt. 1916, v. 21, p. 216–217.

Roberts, J. G.: One lot of betanaphthol was rejected as it was not U. S. P. It had an objectionable odor, contained alphanaphthol, was slightly acid to litmus, and yielded 0.09 per cent of residue upon ignition.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 110.

Anon.: Betanaphthol tablets are stated to be successfully used in the treatment of hookworm.—Chem. & Drug. 1916, v. 88, p. 37.

BISMUTHI BETANAPHTHOLAS.

Murray, B. L.: A description of an electrolytic method for the determination of bismuth in bismuth betanaphthol.—J. Ind. & Eng. Chem. 1916, v. 8, p. 257–258.

BISMUTHI SUBGALLAS.

Merieux: The local application of a mixture of bismuth subgallate with dried serum, made to the wound six hours after inoculation, was found to arrest the evolution of tetanus in the guinea pig. An abstract.—Pharm. J. 1916, v. 96, p. 555.

BISMUTHI SUBNITRAS.

Bockmann, P. W. K.: A report of investigations dealing with the behavior of bismuth subnitrate toward diluted acids.—Archiv. exper. Path. u. Pharmakol. 1916, v. 80, p. 140–145.

Robertson, A.: In a mixture containing bismuth subnitrate and sodium bromide, the bismuth salt was reduced upon standing.—Chem. Abstr. 1916, v. 10, p. 1404 from Pharm. Weekblad, 1915, v. 52, p. 945.

Higgins, Wm. H.: A report on the toxicity of bismuth salts.—J. Am. M. Assoc. 1916, v. 66, p. 648–650.

BROMUM, N. F.

Moles, Enrique: A revision of the atomic weight of bromine based on the normal density of hydrogen bromide gas.—J. chim. phys. 1916, v. 14, p. 389–444.

Scott, Alexander: Dry bromine, prepared by distillation over anhydrous barium oxide, boiled at 57.9° C. under a pressure of 739 mm.—Chem. & Drug. 1916, v. 88, p. 76.

Waller, Elwyn: Notes on the procedure to be followed in examining samples of commercial bromine.—J. Ind. & Eng. Chem. 1916, v. 8, p. 837–838.

Norton, Thomas H.: The reopening of the bromine wells in and about Pomeroy, Ohio, and Mason City, W. Va., will increase the present monthly production of bromine by about 5 to 6 tons.—Com-Rep. 1916, No. 6, p. 98.

BRYONIA, N. F.

Jensen, M. B.: Bryony root is more toxic when fresh than when dried. It contains two glucosides—bryonine, soluble in water but inactive, and bryonidine, insoluble in water but which paralyzes the nervous system.—J. pharm. et chim. 1916, v. 13, p. 25, from Pharm. J. 1915, p. 641, from Rostock Inst. Pharm. Physiolog. Chem.

BUCHU.

Rusby, H. H.: A number of shipments of spurious buchu, representing several species, have been received. On investigation it was found that the error was due to the ignorance of the collectors.—J. Am. Pharm. Assoc. 1916, v. 5, p. 537.

Anon.: In discussing the shortage of buchu, it is stated that 19 varieties of *Barosma* are commercially available in the Port Elizabeth district, South Africa, and that 3 of these when submitted to London for testing were reported to possess the properties of *B. betulina*.—Oil, Paint & Drug Rep. 1916, v. 90, No. 14, p. 83.

Flexer, Fayette J.: Some notes on South African buchu and other medicinal plants.—Com. Rep. 1916, No. 229, p. 1207.

Sayre, L. E.: A sample of buchu examined was rejected, as it was not up to standard.—Bull. Kansas Bd. Health, 1916, p. 10.

CACAO PRÆPARATA, N. F.

Hoekstra, S. W.: A review of the cocoa trade and industry of the Netherlands.—Com. Rep. 1916, No. 138, p. 982–984.

Savini, G.: Descriptions of methods for the determination of theobromine and caffeine in cocoa and chocolate.—Ann. chim. applicata, 1916, v. 6, p. 247–250.

Anon.: Directions for the examination of cocoa, with special reference to the determination of abnormal amounts of cocoa shells.—Chem. Ztg. 1916, v. 40, p. 969–970.

Lange, W.: A description of a method for the quantitative determination of the fat in cacao. The quantity of fat extracted from nine samples ranged from 50.9 to 57.3 per cent. An abstract.—C. U. C. P. Alumni J. 1916, v. 23, p. 220.

CAFFEINA.

Guglialmelli, L., and Palet, L. P. J.: Data showing the caffeine content of maté by the Katz modification of the Keller and the Beittner method.—Chem. Abstr. 1916, v. 10, p. 2007 from Anales soc. cientifica Argentina, 1915, v. 80, p. 246–259.

Rollande, A. C., and Thevenon, L.: A report on the use of caffeine by malingerers to produce tachycardia.—J. pharm. et chim. 1916, v. 14, p. 324.

Nesbit, Edwin L.: Coffea cruda and caffeine. A discussion of the alimentary phenomena of a trial proving on healthy subjects.—Chem. Abstr. 1916, v. 10, p. 2113 from J. Amer. Inst. Homeopathy, 1916, v. 8, p. 1412–1423.

Editorial: The value of caffeine in the treatment of asthma. The anticonstrictor effects of caffeine are too feeble to permit of its being classed with the more familiar remedies adapted to the relief of typical asthmatic symptoms.—J. Am. M. Assoc. 1916, v. 66, p. 431–432.

CALAMUS.

Roberts, J. G.: The whole of one shipment of calamus was in an unfit condition, as it contained a large portion of mouldy root.—Proc. Pennsylvania Pharm. Assoc. 1916.

CALCII CARBONAS PRÆCIPITATUS.

Smith, Carl E.: Notes on the U. S. P. tests for the identity and purity of precipitated calcium carbonate.—Am. J. Pharm. 1916, v. 88, p. 215–216.

Vanderkleed, C. E.: Precipitated calcium carbonate C. P. usually gives a slight precipitate in the test for limit of iron, aluminum, and phosphates.—J. Am. Pharm Assoc. 1916, v. 5, p. 537.

CALCII CHLORIDUM.

Ritsert: Researches on the composition of compounds formed by the action of calcium chloride on milk sugar.—Répert pharm. 1916, v. 28, p. 5.

Vanderkleed, C. E.: One lot of calcium chloride examined left 1.4 per cent of residue in the U. S. P. test for magnesium and alkalies, while the standard is only 0.1 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 537.

Wilson, Harold: The treatment of hay fever with calcium salts. Calcium chloride may be taken in doses of 3 gm. daily for an indefinite time without any apparent injury and with material benefit in a large percentage of cases.—J. Am. M. Assoc. 1916, v. 66, p. 715–716.

CALCII GLYCEROPHOSPHAS.

Anon.: In a review of the U. S. P. IX, regret is expressed for the admission of calcium and sodium glycerophosphates, as their therapeutic efficiency is in doubt at the present time.—J. Am. M. Assoc. 1916, v. 67, p. 764.

Anon.: A discussion concerning the questionable therapeutic value of the glycerophosphates.—J. Am. M. Assoc. 1916, v. 66, p. 1205–1206.

Puckner, W. A.: Report of the council on pharmacy and chemistry of the American Medical Association on the therapeutic value of the glycerophosphates.—J. Am. M. Assoc. 1916, v. 67, p. 1033–1034.

Anon.: The H. K. Mulford Co. reports that solutions of calcium glycerophosphate may be sterilized by heating at 70° for one hour on (five) successive days without decomposition if the solution is rendered acid to the extent of 0.2 per cent.—Drug. Circ. 1917, v. 61, No. 8, p. 25.

CALCII HYPOPHOSPHIS.

Marriott, W. McKim: The therapeutic value of the hypophosphites. From the experiments conducted it was concluded that the hypophosphites possess no specific value as a source of phosphorus for the body.—Rep. Therap. Res. Com. 1916, v. 5, p. 103–111; see also J. Am. M. Assoc. 1916, v. 66, p. 486–488.

Puckner, W. A.: The report of the council on pharmacy and chemistry of the American Medical Association on the hypophosphite fallacy.—J. Am. M. Assoc. 1916, 67, p. 760.

Kolthoff, J. M.: A discussion of various methods in use for the titration of the hypophosphites.—Pharm. Weekblad, 1916, v. 53, p. 909–916.

CALCII LACTOPHOSPHAS, N. F.

Anon.: A reprint of the standards for calcium lactophosphate proposed by the committee on unofficial standards.—J. Am. Pharm. Assoc. 1916. v. 5, p. 86–87.

CALCII PHOSPHAS PRÆCIPITATUS, N. F.

E'we, G. E.: Two lots of calcium phosphate examined contained excessive chlorides.—Proc. Pennsylvania Pharm. Assoc. 1916.

Vanderkleed, C. E.: One sample of precipitated calcium phosphate examined contained chloride in excess of the U. S. P. allowance.—J. Am. Pharm. Assoc. 1916, v. 5, p. 537.

CALCII SULPHAS EXSICCATUS.

Keane, L. A.: A study of the composition and properties of plaster of Paris.—J. Phys. Chem. 1916, v. 20, p. 701–728.

Astruc and Canals: The influence of alcohol on the setting of plaster of Paris.—Chem. Abstr. 1916, v. 10, p. 2027 from J. pharm. et chim. 1916, v. 13, p. 214–218.

CALCII SULPHIDUM CRUDUM.

Anon.: In a reference to the use of calcium sulphide as an antidote for mercuric chloride poisoning, it is stated that J. H. Wilins of Cincinnati, Ohio, was able to save the lives of animals when treat-

ment was begun as late as 48 hours after the poison had been administered.—Canadian Pharm. J. 1916, v. 29, p. 436.

Bretau, Pierre: A description of the methods of preparation and the properties of phosphorescent calcium sulphide.—J. pharm. et chim. 1916, v. 13, p. 33–37.

CALENDULA, N. F.

Gregory, William M.: A discussion of the antiseptic properties of calendula and its tincture.—New York M. J. 1916, v. 104, p. 67.

CALUMBA.

Holmes, E. M.: The principle of quoting the name of the first describer of a plant in parentheses after its name, as in the case of *Jateorhiza palamata* (Lamarck) Miers, is so misleading and is so wasteful of time that its use is to be depreciated. Thus the name *Jateorhiza palamata* does not, of course, occur in Lamarck's work, since he described the plant under the name *Menispermum palmatum*, and the insertion of Lamarck's name can be no help to the student or user of the Pharmacopœia in identifying the drug.—Pharm. J. 1916, v. 97, p. 484.

CALX CHLORINATA.

Comte: A discussion of the volumetric assay of chlorinated lime, Javelle water and Dakin's solution by the usual iodometric method.—J. pharm. et chim. 1916, v. 14, p. 232.

Wilson, J.: Comments on the value of a solution of chlorinated lime for the sterilization of grain. It is stated to be superior to mercuric chloride or formaldehyde for this purpose.—Sci. Am. 1916, Sept. 30, p. 297.

Anon.: Of 23 samples of chloride of lime examined, 10 were found to be below standard.—Rep. Connecticut D. & F. Com. 1916, p. 19.

Casey, F. W.: Two samples of chlorinated lime examined were rejected for being below standard.—Bull. Michigan D. & F. Dept. 1916, No. 252–255, p. 19.

Patch, E. L.: The available chlorine in the six samples of chlorinated lime examined ranged between 8 and 34 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 540.

Street, J. P.: Of 25 samples of chlorinated lime examined, only 3 were found to be of full strength. The U. S. P. requires that chlorinated lime should contain not less than 30 per cent of available chlorine.—J. Am. M. Assoc. 1916, v. 67, p. 695.

Todd, A. R.: Of 13 samples of chlorinated lime examined, 8 were rejected for not complying with the U. S. P. standard.—Bull. Michigan D. & F. Dept. 1916, No. 244–247, p. 20.

CAMPHORA.

Anon.: A note on the history of camphor.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 145–146.

Bohrisch: The author describes a color reaction with vanillin-hydrochloric acid and sulphuric acid which can be used as a test for the identification of natural camphor. An abstract.—Drug. Circ. 1916, v. 60, p. 20.

Parry, Ernest J.: The U. S. P. statement, "the specific rotation $[a]_D$ of camphor in a solution in alcohol at 25° C. is between +41° and +42° in a 200 mm. tube, containing 10 gm. of camphor in each 100 mils of solution," is said to be incorrect as the specific rotation is the same regardless of the length of the tube. Furthermore, the directions to use alcohol of "about 95 per cent" are unfortunate, as the specific rotation varies greatly with the strength of the alcohol.—Chem. & Drug. 1916, v. 88, No. 1913, p. 40.

Anon.: The new edition of the Finnish pharmacopœia specifies that camphor should melt at 175° to 178° C.—Am. Perf. 1916, v. 11, p. 94.

Umney, J. C.: Experimental data on the optical rotation of camphor in alcoholic solution.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 46; see also Chem. Abstr. 1916, v. 10, p. 1403.

Joachimoglu, Georg: A comparative study of the action of d–, l–, and i–camphor revealed the fact that there was no difference in the toxicity of these different forms.—Physiol. Abstr. 1916, v. 1, p. 429 from Arch. exper. Path. u. Pharmakol. 1916, v. 80, p. 1–7.

Likhatcheva, M. P.: A report of researches to determine the action of camphor and menthol on the coronary and peripheral vessels. An abstract.—J. Am. M. Assoc. 1916, v. 67, p. 843.

Leone, Gustavo: A study of the pharmacodynamic action of camphor upon the circulation and on the isolated heart.—Arch. farmacol. sper. 1916, v. 21, p. 370–392.

CAMPHOR-MENTHOL, N. F.

Wimmer, Curt P.: Some experiments with proposed formulas for camphor ice.—Midl. Drug. 1916, v. 50, p. 63–65; see also Chem. Abstr. 1916, v. 10, p. 1405.

Anon.: A formula for the preparation of glycerin camphor ice is presented. An abstract.—Drug. Circ. 1916, v. 60, p. 210.

CANNABIS.

Rusby, H. H.: The genuine cannabis indica of former days has become rather unusual, various forms of cannabis herb, often very seedy, from various countries having replaced it.—J. Am. Pharm. Assoc. 1916, v. 5, p. 537.

Anon.: Bulletin No. 3 of the chemical section of the Wellcome Tropical Research Laboratories at Khartoum is stated to contain descriptions of tests for hashish.—Chem. & Drug. 1916, v. 88, No. 1875, p. 46.

Pearson, W. A.: In discussing the physiological standardization of cannabis, the author gives his experience in regard to the difference of the susceptibility of dogs, and proposes that the chairman of the committee on physiological testing prepare a composite standard fluid extract of cannabis which has been obtained from several sources, and that portions of this standard fluid extract be sent to the various laboratories where physiological standardization is carried out.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1194–1195.

Benedict, A. L.: A discussion of the toxic effects of cannabis as shown by the treatment of 20 cases.—Therap. Gaz. 1916, v. 40, p. 758–759.

Burr, Chas. W.: A description of the effects produced as a result of intoxication with cannabis indica.—Therap. Gaz. 1916, v. 40, p. 554–556.

Tobler, Walther: From experiments, it is concluded that the diuretic constituent of cannabis is cannabinol.—Chem. Zentralbl. 1916, v. 1, p. 1170.

CANTHARIS.

Rogers, T. B.: A report of a study of cantharides and of the cerate of cantharides.—Mulford's Vet. Bull. 1917, v. 8, p. 70–72.

Hintz, H.: A discussion of the advisability of substituting cantharidin for some of the galenical preparations of cantharides.—C. U. C. P. Alumni J. 1916, v. 23, p. 35.

Anon.: The cantharidin content of five samples of Chinese cantharides assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

Scoville, W. L.: The cantharidin content of the samples of cantharides examined ranged from 0.55 to 1.15 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 537.

Vanderkleed, C. E.: Six samples of Chinese cantharides examined ranged from 0.570 to 1.10 per cent in cantharidin content.—J. Am. Pharm. Assoc. 1916, v. 5, p. 537.

CAPSICUM.

Atkins, W. R. G., and Sherrard, G. O.: A report of researches to determine the nature and composition of the pigments of capsicum fruits. An abstract.—J. Roy. Micros. Soc. 1916, part I, p. 88.

Scoville, Wilbur L.: African chillies are specified in the U. S. P. IX because they are usually more pungent than the Japanese and are more desirable as therapeutic agents.—Bull. Pharm. 1916, v. 30, p. 363.

Rusby, H. H.: Capsicum is now defined as *Capsicum frutescens* L., under which name are included a great number of forms, many of them entirely unserviceable for the medicinal uses to which capsicum is applied.—Drug. Circ. 1916, v. 60, p. 537.

Lilly, J. K.: Six lots of capsicum offered as U. S. P. were made up of African and Bombay capsicum and paprika.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

Sayre, L. E.: Of two samples of powdered capsicum examined, one was rejected.—Bull. Kansas Bd. Health, 1916, p. 12.

Anon.: The oleoresin content of one sample of capsicum assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

Vanderkleed, C. E.: The oleoresin content of the six samples of capsicum examined ranged from 13.85 to 20.84 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 537.

CARAMEL, N. F.

Lichtardt, G. H. P.: A short discussion of the applications of the author's test for the identification of caramel.—J. Am. Pharm. Assoc. 1916, v. 5, p. 294.

Carles, P.: Commercial samples of caramel sometimes contain sodium carbonate. The latter is added for the purpose of making the brown color more pronounced and for increasing the density of the syrup prepared therefrom.—Répert. pharm. 1916, v. 28, part 1, p. 286–287.

CARBO ANIMALIS.

Anon.: Analytical data showing the difference in the composition of animal charcoal, molasses charcoal, and blood charcoal.—Pharm. Post, 1916, v. 41, p. 765.

Thorne, Percy C. L.: A study of the methods of preparation and properties of colloidal carbon.—J. Chem. Soc. Lond. 1916, v. 109. p. 202–209.

Wickenden, Leonard, and Hassler, John W.: A description of a rapid method for comparing the decolorizing efficiency of charcoals.—J. Ind. & Eng. Chem. 1916, v. 8, p. 518–519.

Joachimoglu, Georg: A report of experiments to determine the absorption capacity of animal charcoal. A method for carrying out this determination is described in detail.—Biochem. Ztschr. 1916, v. 77, p. 1–13.

Knecht, E., and Hibbert, E.: From experiments, it is concluded that the nitrogen content, as well as the state of aggregation of animal charcoal, is a factor influencing the absorption of coloring matters.—Physiol. Abstr. 1916, v. 1, p. 341.

Weinrich, M.: An apparatus for revivifying bone black or other filtering material. U. S. Patent No. 1,184,398, May 23.—Chem. Abstr. 1916, v. 10, p. 1780.

Strauss, H.: The influence of blood charcoal on peptic digestion. Evidence is presented to prove that, although absorption of the digestive ferments proceeds in the test tube, the living digestive apparatus tends to keep the quantity of unabsorbed ferments at a level which permits of normal digestion taking place.—Deutsch. med. Wchnschr. 1916, v. 42, p. 36–38; see also Chem. Abstr. 1916, v. 10, p. 1044.

CARBONEI DISULPHIDUM.

Denigès, G.: Descriptions of certain microreactions for carbon disulphide.—Ann. chim. analyt. 1916, v. 21, p. 69.

Editorial: Carbon disulphide as an industrial poison. Dr. Alice Hamilton in a recent investigation discovered cases of carbon disulphide cyanosis among the vulcanizers of rubber and the splicers of inner tubes for tires.—J. Am. M. Assoc. 1916, v. 66, p. 357.

CARDAMOMI SEMEN.

Anon.: The dried cardamom seeds only are official, but the druggist should purchase the whole fruit and remove the seeds himself in order to avoid obtaining an adulterated product.—N. A. R. D. J. 1916, v. 23, p. 461.

Lilly, J. K.: Three lots of cardamon examined were found to be partially extracted and one consisted of wild cardamom seed.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

CARUM.

Rosendahl, H. V.: Remarks on wild caraway and the volatile oil obtained therefrom by distillation.—Svensk farm. Tidskr. 1916, v. 20, p. 1–2.

Roberts, J. G.: Three lots of caraway seed examined contained 0.35, 0.57, and 0.31 per cent., respectively, of foreign matter and yielded 7.23, 7.17, and 8.23 per cent of ash.—Proc. Pennsylvania Pharm. Assoc. 1916.

CARYOPHYLLUS.

Anon.: A note on the history and distribution of cloves.—Perf. & Fss. Oil Rec. 1916, v. 7, p. 20.

Folpmers, T.: Data obtained in the determination of moisture in cloves by the direct and indirect methods are presented.—Chem. Weekblad, 1916, v. 13, p. 14–16.

Frary, Guy G.: One of the six samples of powdered cloves examined was rejected for not being of standard quality.—Rep. South Dakota F. & D. Com. 1916, No. 16, p. 134–135.

CASCARA SAGRADA.

Woodward, G. C.: A consular report describing the collection of cascara bark in British Columbia.—Com. Rep. 1916, No. 214, p. 966.

Rusby, H. H.: The fanciful name "cascara sagrada" has been substituted as the Latin title for *Rhamnus purshiana*, which latter is as pure Latin as the former is Spanish.—Drug. Circ. 1916, v. 60, p. 537.

Schneider, Albert: The color of powdered cascara sagrada bark is given by the U. S. P. as "light brown to olive brown." This powder is brown with yellow, the brown predominating, hence yellowish-brown.—Drug. Circ. 1916, v. 60, p. 693.

Gathercoal, E. N.: The adulterant of cascara bark noted by F. A. Miller in 1912 has been identified as the bark of *Prunus padus*. This bark is a commercial article in Germany, according to E. M. Holmes, and has been received in England as a substitute for wild cherry bark.—J. Am. Pharm. Assoc. 1916, v. 5, p. 303.

Webster, Herbert T.: A comparison of the therapeutic uses of *Rhamnus purshiana* and *Rhamnus californica*.—J. Am. Vet. Med. Assoc. 1916, v. 49, p. 379–382.

CASCARILLA, N. F.

Rusby, H. H.: Cascarilla bark has become very poor in quality, being mostly the scrapings of small limbs and twigs. It would appear that this shrub is now almost exterminated in the wild state.—J. Am. Pharm. Assoc. 1916, v. 5, p. 537.

CASTANEA, N. F.

Tunmann, O.: Researches on the extraction and microdetection of æsculin in horse-chestnut bark.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 45–67.

Pollak, Leopold: A report of researches relating to the identification of the extract of chestnut wood. An abstract.—Chem. Zentralbl. 1916, v. 87, part 1, p. 441–442.

CAULOPHYLLUM, N. F.

Anon.: A short note giving information relative to the cultivation of blue cohosh in America.—N. A. R. D. J. 1916, v. 21, p. 215.

Pilcher, Delzell, and Burman: A report of investigations to determine the action of blue cohosh on the excised uterus of the guinea pig.—J. Am. M. Assoc. 1916, v. 67, p. 490–492.

CERA ALBA.

Verda, A.: A description of a color reaction with copper for the detection of stearin in wax.—Répert. pharm. 1916, v. 28, part 1, p. 208.

CERA FLAVA.

Salamon, M. S.: A discussion of data obtained in the sampling and analysis of beeswax.—J. Soc. Chem. Ind. 1916, v. 35, p. 8–10.

Richardson, F. W., and Bracewell, G. A.: A discussion of the analysis of waxes, with special reference to beeswax and wool wax.—J. Soc. Chem. Ind. 1916, v. 35, p. 160–163.

Fabris, U.: Data showing the viscosity of beeswax at 100° C., using an Ostwald's viscosimeter. The author states that this constant may be of value in detecting impurities where other constants fail.—Ann. Falsif. 1916, v. 9, p. 100; see also Chem. Abstr. 1916, v. 10, p. 2411.

Ryan, Hugh, and Dillon, T.: From experiments, the authors conclude that the "potash-lime method" for determining hydrocarbons in beeswax yields results which are too high.—Nature, 1916, v. 96, p. 668.

Brill, Harvey C., and Agcaoili, Francisco: A comparison of the constants of Philippine beeswax with the Japanese and Korean.—Philippine J. Sc. 1916, v. 11, sec. a, p. 15–18.

Smith, F. Willoughby: According to figures obtained from the Agricultural Society of the Caucasus, the total production of beeswax in Russia reaches on the average 8,847,638 pounds per year.—Com. Rep. 1916, No. 77, p. 7.

Anon: A note on the adulteration of Indian beeswax with paraffin.—Chem. & Drug. 1916, v. 88, p. 253.

Congdon, Leon A.: Of three samples of yellow wax examined, one was rejected.—Rep. Kansas Bd. Health, 1916, p. 133.

Lilly, J. K.: Samples of beeswax examined were found to be adulterated with ceresin.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16 p. 46.

Sayre, L. E.: A sample of yellow wax examined was adulterated with paraffin and contained fatty acids.—Bull. Kansas Bd. Health 1916, v. 12, p. 12.

CEREVISIÆ FERMENTUM COMPRESSUM, N. F.

Neuberg, Carl: A study of the chemical constitution of yeast protein.—Physiol. Abstr. 1916, v. 1, p. 280, from Chem. Zentralbl. 1916 v. 1, p. 162–163.

Bokorny, Th.: A report of researches showing the presence of emulsin and myrosin in compressed yeast from the Munich brewery and also in baker's yeast.—Physiol. Abstr. 1916, v. 1, p. 391–392.

Gregg, H.: A report of experiments to determine the value of yeast as a food. Yeast extract is stated to be an excellent substitute for meat extract. An abstract.—Apoth.-Ztg. 1916, v. 31, p. 24.

Salomon, H.: A discussion of the use and value of yeast as an article of diet.—Physiol. Abstr. 1916, v. 1, p. 328; see also H. Wintz and Max Rubner, Physiol. Abstr. 1916, v. 1, p. 238.

CERII OXALAS.

Wilcox, Reynold W.: A discussion of cerium, with special reference to the therapeutic uses of the oxalate. —New York M. J. 1916, v. 104, p. 836–838.

CETACEUM.

Frerichs, G.: A discussion of the tests for spermaceti. The tests laid down in the Ph. Germ. are inadequate. More reliable tests are described.—Chem. Zentralbl. 1916, v. 2, p. 282, from Apoth.-Ztg. 1916, v. 31, p. 209–210.

Lundin, P. E.: The determination of the specific gravities of 10 samples of spermaceti by the hydrostatic method showed this constant to vary from 0.931 to 0.949. This method is stated to be more satisfactory than the floating method prescribed by most pharmacopœias.—Pharm. Weekblad, 1916, v. 53, p. 1000.

CHIONANTHUS, N. F.

Anon.: A short note giving information relative to the production and collection of fringe-tree bark in America.—N. A. R. D. J. 1916, v. 21, p. 1114.

CHONDRUS.

Holmes, E. M.: The *Gigartina mamillosa* of J. Agardh is given as one of the sources of the drug. This is an improvement, for it is practically impossible, when collecting *Chondrus crispus*, to avoid gathering some pieces of *Gigartina*, and consequently these are always present in commercial samples.—Pharm. J. 1916, v. 97, p. 484.

Rusby, H. H.: Great quantities of chondrus have arrived in an unbleached condition, very dark in color and quite sandy and dirty. It is usually imported as "French moss" or "crude moss."—J. Am. Pharm. Assoc. 1916, v. 5, p. 538.

CHROMII TRIOXIDUM.

Field, Allen J.: A description of a modification of the Treadwell-Hall method for the analysis of chromium oxide.—J. Ind. & Eng. Chem. 1916, v. 8, p. 238.

CHRYSAROBINUM.

Holmes, E. M.: Chrysarobin is attributed to *Voucapoua Araroba* (Aguiar), Druce. This name was never used by Aguiar. He described the plant as *Andira Araroba*, and the use of *Voucapoua* is therefore to be deprecated as serving no useful purpose.—Pharm. J. 1916, v. 97, p. 485.

Editorial: Chrysarobin, widely used in the treatment of psoriasis, is manufactured from goa or araroba powder, which is said to come entirely from the American continent—from the State of Bahia, Brazil.—J. Am. M. Assoc. 1916, v. 66, p. 1784–1785.

Eder, Robert: A report of an investigation relative to the constituents of commercial chrysarobin.—Chem. Zentralbl. 1916, v. 1, p. 978–979 from Archiv. Pharm. 1916, v. 254, p. 1–33.

CINCHONA.

Anon.: Statistical notes dealing with the production of cinchona bark and quinine sulphate in India.—Oil, Paint & Drug Rep. 1916, v. 90, No. 26, p. 72.

Editorial: Notes on the introduction of cinchona trees in India.—Brit. M. J. 1916, v. 1, p. 247.

van Itallie, L.: Notes on the quantitative determination of alkaloids in cinchona bark and of the extract of cinchona.—Pharm. Weekblad, 1916, v. 53, p. 1667–1671.

Lenci: A description of a method for the alkaloidal assay of cinchona whereby the alkaloids are precipitated with an excess of picric acid and the excess of the latter titrated with nitron.—Chem. & Drug. 1916, v. 88, p. 40.

Montemartini, C., and Bovini, F.: Data showing the influence of temperature on the rotatory power of mixtures of cinchona alkaloids.—Gaz. Chim. Ital. 1916, v. 46, p. 153–171.

Kaufmann, Adolph, et al.: A report of researches dealing with the degradation products of the cinchona alkaloids.—Ber. deutsch. chem. Gesellsch. 1916, v. 49, p. 2299–2310.

Anon.: The total anhydrous alkaloidal content of six samples of yellow cinchona assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

Clampett, G. W.: Two samples of cinchona bark examined contained 3 per cent total alkaloids and 2.3 per cent ether alkaloids, respectively.—Proc. Texas Pharm. Assoc. 1916, p. 80.

Lilly, J. K.: Three lots of cinchona examined were low in alkaloidal content.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

Swift, E. G.: Of 15 samples of cinchona bark examined, 2 contained 0.5 per cent of ether-soluble alkaloids, or less; 1 contained 0.84

per cent; 6 contained between 1 and 2 per cent, and 4 above 5 per cent.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

Vanderkleed, C. E.: The 10 lots of yellow cinchona examined varied in alkaloidal content from 6.5 to 11 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 538.

CINCHONA RUBRA.

Anon.: The total anhydrous alkaloidal content of 27 samples of red cinchona assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

Lilly, J. K.: Two lots of red cinchona examined were found to be below the U. S. P. requirements for alkaloidal content.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

Roberts, J. G.: One lot of cinchona (red) examined contained 7.29 per cent of anhydrous cinchona alkaloids.—Proc. Pennsylvania Pharm. Assoc. 1916.

CINNAMOMUM SAIGONICUM.

Schneider, Albert: The length of the bast fibers of Saigon cinnamon is given as "from 0.30 to 1.50 mm." (30 to 1,500 microns) in the U. S. P., whereas none attain a length to exceed 150 microns. If the measurements given pertained to groups of bast cells rather than to individual bast cells, it should have been so stated.—Drug. Circ. 1916, v. 60, p. 692.

von Fellenberg, P.: A method for the estimation of cinnamic aldehyde in cinnamon depends on the coloration which develops when the aldehyde is treated with sulphuric acid and isobutyl alcohol. An abstract.—Analyst (The), 1916, v. 41, p. 274–275.

Holmes, E. M.: Notes on the sources, botanical, and commercial, of cassia and cinnamon barks.—Perf. & Ess. Oil Rev. 1916, v. 7, p. 14–17.

Anon.: A reprint of an account of the collection of cinnamon bark as given by the Greek historian Herodotus.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 40.

Lilly, J. K.: One lot of Saigon cinnamon examined consisted of Cassia cinnamon.—Oil, Paint & Drugs Rep. 1916, v. 90, No. 16, p. 46.

Lea, E. J.: Samples of cinnamon examined contained exhausted and worthless ground cinnamon bark.—Bull. California Bd. Health, 1917, v. 12, p. 231.

Frary, Guy G.: All of the six samples of powdered cinnamon examined were of standard quality.—Rep. South Dakota F. & D. Com. 1916, No. 16, p. 134.

COCA.

Anon.: The ether-soluble alkaloidal content of six samples of coca leaves assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

COCAINA.

Harman, N. B.: A description of a method for preparing stable solutions of cocaine and homatropine.—Brit. M. J. 1916, v. 2, p. 178.

Roth, G. B.: A comparison of the toxicity of cocaine and novocaine.—Bull. Hyg. Lab. 1916, No. 109.

Editorial: Aside from its action as a local anesthetic, cocaine produces three conditions which have especially aroused the interest of clinicians and pharmacologists. These are the dilation of the pupil, the local constriction of certain blood vessels, and the acceleration of the heart sometimes seen in cases of poisoning by this drug.—J. Am. M. Assoc. 1916, v. 66, p. 195–196.

Painter, A. M.: Comments on the employment of cocaine anesthesia for submucous resection of the nasal septum.—J. Am. M. Assoc. 1916, v. 66, p. 114.

COCAINÆ HYDROCHLORIDUM.

Virden: The author states that frequent or even prolonged boiling of solutions of cocaine hydrochloride does not impair or destroy their anesthetic value. An abstract.—Drug. Circ. 1916, v. 60, p. 212.

Reutter, L.: A note calls attention to the incompatibility of cocaine hydrochloride with benzoate of mercury. An abstract.—Pharm. Zentralh. 1916, v. 57, p. 9.

COCCUS.

Styles, George K.: A consular report of the prospects for the year's crop of cochineal in the Canary Islands.—Com. Rep. 1916, No. 150, p. 1172.

Roberts, J. G.: The ash yield of six samples of cochineal examined ranged from 3.67 per cent to 5.47 per cent.—Proc. Pennsylvania Pharm. Assoc. 1916.

CODEINA.

Carlinfanti, E.: Description of colorimetric methods for the determination of minute quantities of morphine and codeine. For codeine, the blue color produced with ferric chloride is the basis of the assay.—Chem. Abstr. 1916, v. 10, p. 1909.

Tunmann, O.: Methods for the microchemical distinction of morphine and codeine.—J. Chem. Soc. 1916, v. 10, p. 655 from Apoth.-Ztg. 1916, v. 31, p. 148.

CODEINÆ PHOSPHAS.

Duncan, William: Attention is directed to the fact that a 5 per cent solution of codeine phosphate precipitates on the addition of ammonia water, and that the Ph. Brit. statement to the contrary is wrong.—Pharm. J. 1916, v. 96, p. 352.

Anon.: A note on the incompatibility of codeine phosphate with alkali bromides.—Am. Drug. 1916, v. 64, p. 224.

COFFEA TOSTA, N. F.

Sayre, L. E.: In experimental researches on the volatile principles of roasted coffee, the author succeeded in isolating and identifying pyridine.—Bull. Pharm. 1916, v. 30, p. 276–278; see also Chem. Abstr. 1916, v. 10, p. 2250.

Anon.: Observations on the nature of the fermentation that takes place in tea, cocoa, coffee, and tobacco.—Südd. Apoth.-Ztg. 1916, v. 56, p. 12.

Editorial: Coffee is one of those dietary adjuncts which modern man has employed, like tea, alcohol, tobacco—and, perhaps, one ought to add the ubiquitous chewing gum—presumably to increase the pleasure of his existence quite independently of any need which they might serve in the organism.—J. Am. M. Assoc. 1916, v. 66, p. 120.

COLCHICI CORMUS.

E'we, G. E.: Of four samples of colchicum corm assayed, the colchicine content of one was above standard and three below.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

Roberts, J. G.: Each of two lots of colchicum corm examined contained 0.35 per cent of colchicine.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 111.

COLCHICI SEMEN.

Umney, J. C.: Data relative to the sugar and extractive content of colchicum seed.—Pharm. J. 1916, v. 41, p. 393.

E'we, G. E.: The colchicine content of three samples of colchicum seed assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

Roberts, J. G.: The following amounts of colchicine were found in four lots of colchicum seed examined: 0.57, 0.81, 0.71, and 0.68 per cent.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 111.

COLCHICINA.

Merck, E.: Some data on the chemical and physical properties of pure colchicine. An abstract.—Chem. & Drug. 1916, v. 88, p. 40.

Vanderkleed, C. E., and E'we, G. E.: The melting point of colchicina is difficult to observe because the fused alkaloid does not form a meniscus in the melting-point tube, as occurs with most compounds, but forms globules or wets the inside of the tube. If the point at which a meniscus is formed is taken as the melting point, the temperature observed will be high. For instance, a sample of colchicina

formed globules at 144° C., but did not form a meniscus in the tube until a temperature of 160° C. was reached.—J. Am. Pharm. Assoc. 1916, v. 5, p. 715–716.

Vanderkleed, C. E.: The colchicine on the market contains excessive amounts of chloroform and moisture. In 12 lots examined, the loss in weight on heating at 102° C. was from 2.2 to 29.2 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 538.

E'we, G. E.: Colchicine continues to show a large loss on heating at 100° C., amounting to as high as 25.7 per cent. The loss is chiefly chloroform.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 111.

COLOCYNTHIS.

Swift, E. G.: Most of the colocynth on the market consists of the pulp which has been gathered after the fruit has reached the age where the seeds turn brown.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

CONDURANGO, N. F.

Lilly, J. K.: One lot of an unknown bark was offered as condurango.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

COPAIBA.

Parry, Ernest J.: Much work has been done on copaiba during recent years, but in spite of the fact that the refractive index and optical rotation of the oil are well defined and known, the U. S. P. gives no refractive index at all. and the optical rotation is merely given as "not less than —7°." The acidity limits of 28 to 95 appear to be too wide even for genuine Pará balsam.—Chem. & Drug. 1916, v. 88, No. 1913, p. 40.

Beckers, W.: The author reports on the quality of eight German samples of copaiba balsam dispensed in capsules. An abstract.—C. U. C. P. Alumni J. 1916, v. 23, p. 186.

COPTIS, N. F.

Anon.: A short note giving information relative to the cultivation of goldthread in America.—N. A. R. D. J. 1916, v. 22, p. 215.

CORNUS, N. F.

Anon.: A short note giving information relative to the production and collection of dogwood bark in America.—N. A. R. D. J. 1916, v. 21, p. 1114.

COUMARINUM, N. F.

H. J. P.: A review of a volume by H. Simonis entitled *Die Cumarine* states that the work contains 298 pages dealing with the history, synthesis, properties, and uses of coumarin.—Chem. Weekblad, 1916, v. 13, p. 651–652.

CREOSOTUM.

E'we, G. E.: The quality of beechwood creosote during the past year has been poor, especially in odor and color. A rank odor, and amber, brown, and pink colors were noted in samples examined.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 111.

Clampett, G. W.: Of nine samples of creosote examined the guaiacol content ranged from 20 to 60 per cent.—Proc. Texas Pharm. Assoc. 1916, p. 80.

Orchard, A.: A note on the use of creosote in the treatment of rheumatic affections.—Brit. M. J. 1916, v. 1, p. 167.

CRESOL.

E'we, G. E.: Most of the cresol is offered as "technical" and is not as soluble in water as that offered as "U. S. P.," but it produces a clear soluble compound solution of cresol of satisfactory phenol coefficient.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 111.

Vanderkleed, C. E.: Only 2 of the 16 lots of cresol examined had a specific gravity within the U. S. P. limits of 1.036–1.038. All but one of the samples answered the requirements of 90 per cent, distilling between 195 and 205° C.—J. Am. Pharm. Assoc. 1916, v. 5, p. 538.

Steenhauer, A. J.: Data showing the relative disinfecting powers of ortho-, meta-, and para-cresol and mercury oxycyanide.—Pharm. Weekblad, 1916, v. 53, p. 680–685.

CROCUS, N. F.

Braune, F. R.: The author recommends storing saffron in small glass-stoppered bottles, with a pledget of moist cotton fitting into the hollow stopper. An abstract.—Merck's Report, 1916, v. 25, p. 189.

Anon.: A short note giving information relative to the cultivation of saffron in America.—N. A. R. D. J. 1916, v. 21, p. 704.

Pierlot: On the value of the determination of the total nitrogen by the Kjeldahl method as means of indicating the purity of saffron. It is stated that it is also desirable to determine the total ammonium and the potassium nitrate present, since ammonium salts and potassium nitrate are sometimes used as adulterants.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 490–504; see also Ann. Falsif. 1916, v. 9, p. 24–29; J. Soc. Chem. Ind. 1916, v. 35, p. 595.

Vicari, G.: Experiments with phosphomolybdic acid as a reagent for the detection of safflower in saffron.—Répert. Pharm. 1916, v. 28, part 1, p. 24–25, from J. suisse pharm. Oct. 28, 1915; see also A. Verda, p. 207.

Tunmann, O.: A description of a microchemical method for distinguishing between crocetin and the other carotinoids, especially carotin.—Chem. Zentralbl. 1916, v. 2, p. 279, from Apoth.-Ztg. 1916, v. 31, p. 237–238.

Tunmann, O.: A discussion of certain phases of the adulteration of saffron.—Chem. Zentralbl. 1916, v. 2, 282–283, from Apoth.-Ztg. 1916, v. 31, p. 230–231.

CUBEBA.

Lilly, J. K.: One lot of cubeb examined exceeded the U. S. P. requirements in the amount of stems which it contained.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

Halberkann, J.: A note on the isolation of a pseudocubebin from the bark of *Ocotea usambarensis* Engl.—Chem. Zentralbl. 1916, v. 2, p. 331–332.

CYPRIPEDIUM, N. F.

Hommell, P. E.: An enumeration of the varieties of cypripedium employed in medicine and a discussion of their therapeutic uses.—Proc. New Jersey Pharm. Assoc. 1916, p. 40–43.

Lilly, J. K.: One lot of lady slipper examined consisted of some unknown root mixed with serpentaria.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

DELPHINIUM, N. F.

Anon.: A short note giving information relative to the cultivation of larkspur in America.—N. A. R. D. J. 1916, v. 21, p. 702.

Roberts, J. G.: One lot of larkspur seed containing numerous small stones yielded 8.3 per cent of ash. A determination was made on clean, hand-picked seed, and 5.76 per cent of ash was obtained.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 114.

DIACETYLMORPHINA.

McIver and Johnson: Heroin came into use by the medical profession about 1898 and was thought to be a safe and efficient drug for use in place of morphine. Some time later it was noticed that patients had become addicted to the use of this drug, but not to the same extent as was the case with morphine.—J. Am. M. Assoc. 1916, v. 66, p. 478.

Doran, James M.: A description of a rapid method for the separation of heroin and morphine in the quantitative determination of these substances.—J. Am. Pharm. Assoc. 1916, v. 5, p. 163–165.

DIASTASUM.

Takamine, J.: U. S. Patent No. 1,192,584. A method for the production of a diastatic product by means of the fungus *Aspergillus oryzæ* is described.—Chem. Abstr. 1916, v. 10, p. 2316.

Pollak, I.: A review dealing with diastase preparations and their application in practice.—Chem. Abstr. 1916, v. 10, p. 798.

Palmer, C. C.: The author has demonstrated the presence of diastase in the saliva of the ox.—Am. J. Physiol. 1916, v. 41, p. 483–491.

Rakuzin, M. A., et al.: In a discussion of the limits of sensitiveness of color reactions for albumins and peptonizing enzymes, it is stated that diastase gives the Molisch, biuret, xanthoproteic, and oxygen tests.—Chem. Abstr. 1916, v. 10, p. 1655 from J. Russ. Phys. Chem. Soc. 1915, v. 47, p. 2051–2056.

Grimbert, L.: A report of an investigation of the assay of diastase according to the method of the French pharmacopœia.—J. pharm. et chim. 1916, v. 13, p. 5–16; see also Ann. Falsif. 1916, v. 9, p. 90–95.

DIGITALIS.

Sharp, Gordon: A historical note on the introduction of digitalis as a therapeutic agent.—Pharm. J. 1916, v. 96, p. 347.

Kiliani, H.: Researches on digitalis glucosides and their decomposition products.—J. Soc. Chem. Ind. 1916, v. 35, p. 615 from Ber. deutsch chem. Gesellsch. 1916, v. 49, p. 701.

Berry, E.: A report of an investigation of the active principles of *Digitalis purpurea*.—Pharm. J. 1916, v. 41, p. 783.

Puckner, W. A.: A report on digitalysatum. A review of the exaggerated claims made in regard to it; in the main indirectly.—J. Am. M. Assoc. 1916, v. 66, p. 135–136.

Straub, W.: Researches on the chemical constitution and pharmacological action of digitalis drugs.—J. Chem. Soc. Lond. 1916, v. 110, p. 617 from Biochem. Ztschr. 1916, v. 25, p. 132–134.

Hercod, E.: A retrospective study of the physiological standardization of heart tonics.—Chem. & Drug. 1916, v. 88, p. 147–148 and 803.

Hamner, J. W.: A report of analytical data obtained in the physiological testing of digitotal and other digitalis preparations by the Focke and Gottlieb methods.—Svensk farm. Tidskr. 1916, v. 20, p. 273–277.

Zeigler, W. H.: A criticism of the biologic methods for the standardization of digitalis with a suggestion for a new method. The fresh-water terrapin, or turtle, is suggested as the test animal.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1188–1193.

Loewe: A polemic argument against R. Gottlieb in defense of O. Loeb on the standardization of digitalis by the frog method with an addendum by R. Gottlieb.—Münch. med. Wchnschr. 1916, v. 63, p. 424–425 through Chem. Abstr. 1916, v. 10, p. 1690.

Roth, George B.: Digitalis standardization. The physiological evaluation of fat-free digitalis and commercial digitalin.—Bull. Hyg. Lab. 1916, No. 102, p. 5–38.

Rowntree, L. G., and Macht, D. T.: Data showing the relative physiological activity of German, English, and American digitalis.—J. Am. M. Assoc. 1916, v. 66, p. 870–871.

Newcomb, E. L.: Data showing the potency of the digitalis grown at the University of Minnesota in 1915.—Proc. Minnesota Pharm. Assoc. 1916, p. 153–155.

Wasicky, R.: Biological tests of *Digitalis ambiguia* Murr. by the one-hour method of Hale showed it to be as valuable as the official digitalis.—Chem. Zentralbl. 1916, v. 87, pt. 1, p. 1264.

Anon.: The digitoxin content of two samples of digitalis leaves assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

Clampett, G. W.: Of eight samples of digitalis leaves examined, the digitoxin content ranged from 0.088 to 0.30 per cent.—Proc. Texas Pharm. Assoc. 1916, p. 80.

Vanderkleed, C. E.: The two samples of digitalis leaves examined contained 0.293 and 0.365 per cent of digitoxin, the standard being 0.25 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 538.

Patch, E. L.: The ash content of the four samples of digitalis leaves examined was from 8 to 9.5 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 538.

Halsey, J. T.: A discussion of the dosage of digitalis and its tincture.—Southern M. J. 1916, v. 9, p. 579–580.

Schapiro, F.: The action of digitalis alone, and in combination with ephinephrine and thyroid upon the heart of *Rana esculenta*.—Biochem. Ztschr. 1916, v. 73, p. 1–14; see also Chem. Abstr. 1916, v. 10, p. 1680.

Schulz, Hugo: A report of some new investigations relative to the influence of digitalis, or plants related to it botanically, upon the color sensitiveness of the human eye.—Physiol. Abstr. 1916, v. 1, p. 514.

Halsey, J. T.: A discussion of the clinical value of various "digitalis" drugs and preparations.—Southern M. J. 1916, v. 9, p. 677–679.

Haskell, Charles C., McCants, C. S., and Gardner, E. P.: Researches on the rate of and absorption of various digitalis preparations from the gastro-intestinal tract.—Arch. Int. Med. 1916, v. 18, p. 235–243.

Golovinsky, J. V.: From the action of solutions of digipuratum on the splanchnic and portal systems, the author concludes that the increased blood pressure after the administration of digitalis is due to the increased cardiac activity. An abstract.—J. Am. M. Assoc. 1916, v. 66, p. 850.

White and Sattler: The effect of digitalis on the normal human electrocardiagram with especial reference to A–V conduction.—J. Exper. M. 1916, v. 23, p. 615–632; see also Chem. Abstr. 1916, v. 10, p. 1681.

Stevens, Harold W.: Some electrocardiographic studies of patients under digitalis treatment.—Boston M. & S. J. 1916, v. 174, p. 345–350.

Taylor, Seymour: Notes on the value of digitalis in the treatment of aortic incompetence.—Lancet, 1916, v. 191, p. 96–98.

White, Paul D.: A report on cases of auricular standstill—an unusual effect of digitalis on the heart.—Boston M. & S. J. 1916, v. 175, p. 233–236.

DIOSCOREA, N. F.

Anon.: A short note giving information relative to the cultivation of the wild yam in America.—N. A. R. D. J. 1916, v. 21, p. 1275.

DULCAMARA, N. F.

Anon.: A short note giving information relative to the production and collection of bittersweet in America.—N. A. R. D. J. 1916, v. 21, p. 1114.

ECHINACEA, N. F.

Lilly, J. K.: One lot of echinacea examined consisted of the roots of *Rudbeckia fulgida*.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

ELIXIRIA.

Anon.: As it is a fact that the interests of good pharmacy, as well as the interests of the patient, require the best possible in medicine, so it is to be hoped that in all formulas for an elixir in which a fluid extract is indicated the drug itself will be employed. It is a serious error that the National Formulary does not state this in just so many words.—N. A. R. D. J. 1916, v. 22, p. 1034.

Kimmich, E.: A report of investigations to determine the cause for the deterioration of elixirs containing iron salts.—Canadian Pharm. J. 1916, v. 49, p. 223.

Cook, E. Fullerton: A number of new vehicle elixirs have been introduced into the N. F. in order to provide for the physician a greater variety of flavors than were heretofore available.—Drug. Circ. 1916, v. 60, p. 542.

Frary, Guy G.: Six of the 19 samples of Elixir of Lactated Pepsin examined were found to be low in proteolytic power. There is no fixed standard in the U. S. P. or N. F. for this preparation, but the values were computed with respect to the designation on the label, viz, "40 grain," "80 grain," etc.—Rep. South Dakota F. & D. Com. 1916, No. 16, p. 142–144.

ELIXIR AROMATICUM.

Anon.: Magnesium carbonate is recommended for use in clarifying aromatic elixir. The product is stated to be perfectly clear on the first filtration and not to precipitate on standing.—Midl. Drug. 1916, v. 50, p. 22.

ELIXIR CASCARAE SAGRADAE, N. F.

Anon.: The change in the title for Elixir Rhamni Purshianæ, N. F. III, is of doubtful value and a backward step in science.—N. A. R. D. J. 1916, v. 22, p. 1081.

ELIXIR CATHARTICUM COMPOSITUM, N. F.

Anon.: The retention of the therapeutically suggestive title for this elixir seems queer.—N. A. R. D. J. 1916, v. 22, p. 1081.

ELIXIR CINCHONÆ ALKALOIDORUM, N. F.

Anon.: While the elixir of cinchona alkaloids is an elegant and useful preparation pharmacally, it would be much more efficient medicinally if made from cinchona bark. It is also rather weak in strength.—N. A. R. D. J. 1916, v. 22, p. 1081.

ELIXIR DIGESTIVUM COMPOSITUM, N. F.

Anon.: The deletion of this preparation, while it will in no way affect its extended use, seems to be a victory for the adherence of "test tube" medication, and a defeat for the practical prescribing physician.—N. A. R. D. J. 1916, v. 22, p. 1082.

ELIXIR FERRI HYPOPHOSPHITIS, N. F.

Anon.: In the preparation of the elixir of iron hypophosphite, ferric hypophosphite is now used, with the addition of potassium citrate, the latter for the purpose of obtaining a more permanent preparation and as an aid in dissolving the iron salt.—N. A. R. D. J. 1916, v. 22, p. 1082.

ELIXIR FERRI, QUININÆ ET STRYCHNINÆ, N. F.

Cook, E. Fullerton: The only official elixir of iron, quinine, and strychnine is that of the N. F., and it does not contain the ingredients in the form of phosphates. The latter was purposely omitted from both the U. S. P. and N. F. because of its instability.—Drug. Circ. 1916, v. 60, p. 542.

Stinson, Ray: Ninety-seven, or 83 per cent, of the 117 samples of elixir of iron, quinine, and strychnine examined were below standard, the minimum being 24 per cent of the U. S. P. strength.—Proc. North Dakota Pharm. Assoc. 1916, p. 112.

ELIXIR FERRI, QUININÆ ET STRYCHNINÆ PHOSPHATUM.

Diekman, George C.: It is to be regretted that the elixir of iron, quinine, and strychnine phosphate has been deleted from the U. S. P. and not taken up by the N. F. An article in such common use can not be relegated to the scrap heap by any revision committee. The reason given for its omission—i. e., that a satisfactory formula for its preparation could not be devised—is unfortunate since manufacturers produce an elixir which is most satisfactory in all respects.—Pract. Drug. 1916, v. 34, No. 10, p. 26.

ELIXIR FORMATUM, N. F.

Anon.: The elixir of formates would be more efficient were the potassium salt replaced with calcium carbonate.—N. A. R. D. J. 1916, v. 22, p. 1082.

ELIXIR GENTIANÆ ET FERRI, N. F.

Anon.: Detailed directions for the preparation of elixir of gentian with tincture of chloride of iron are given.—N. A. R. D. J. 1916, v. 21, p. 863.

ELIXIR GLYCEROPHOSPHATUM, N. F.

Anon.: Detailed directions for the preparation of the elixir of glycerophosphates are given and discussed.—N. A. R. D. J. 1916, v. 21, p. 1064.

ELIXIR GLYCEROPHOSPHATUM COMPOSITUM, N. F.

Anon.: As an improvement in the formula for the preparation of the elixir of glycerophosphates, it is suggested that glycerophosphoric acid might replace the lactic acid.—N. A. R. D. J. 1916, v. 22, p. 1259.

ELIXIR MALTI ET FERRI, N. F.

Anon.: The elixir of malt and iron is an elegant preparation which should have been retained, as its medicinal worth exceeds that of many less important elixirs that have not been deleted.—N. A. R. D. J. 1916, v. 22, p. 1259.

ELIXIR PEPSINI, BISMUTHI ET STRYCHNINÆ, N. F.

Anon.: This elixir could well have been deleted from the N. F. as all soluble salts of bismuth are injurious when taken internally, and combinations of such with pepsin are unscientific and may be dangerous.—N. A. R. D. J. 1916, v. 22, p. 1259.

ELIXIR PEPSINI ET RENNINI COMPOSITUM, N. F.

Anon.: A discussion of some liquid preparations of pepsin, including several formulas.—N. A. R. D. J. 1916, v. 21, p. 711–712; see also p. 863–864.

Anon.: As a medical monstrosity this preparation is certainly much worse than the compound digestive elixir of the N. F. III, yet the latter was deleted. The amount of alcohol is entirely too great; in fact, alcohol and pepsin are pharmacally and medicinally incompatible.—N. A. R. D. J. 1916, v. 22, p. 1259.

Congdon, Leon A.: One sample of essence of pepsin examined was rejected.—Rep. Kansas Bd. Health, 1916, p. 133.

ELIXIR PHOSPHORI, N. F.

Anon.: The present elixir contains no sugar, which is rather a handicap, for sugar apparently increases the medicinal action of phosphorus without being detrimental in any way.—N. A. R. D. J. 1916, v. 22, p. 1259-1260.

ELIXIR PICIS COMPOSITUM, N. F.

Anon.: In discussing the preparation of the compound elixir of tar, it is stated that the morphine is of little value in the elixir and it is hoped that the new edition of the N. F. will omit it.—N. A. R. D. J. 1916, v. 21, p. 659.

ELIXIR POTASSII BROMIDI, N. F.

Todd, A. R.: Of three samples of elixir of potassium bromide examined, one was rejected.—Bull. Michigan D. & F. Dept. 1916, No. 244-247, p. 20.

ELIXIR SODII SALICYLATIS COMPOSITUM, N. F.

Anon.: A formula for the preparation of the compound elixir of sodium salicylate in which the drugs instead of fluid extracts are employed is given and discussed.—N. A. R. D. J. 1916, v. 22, p. 166.

ELIXIR TERPINI HYDRATIS, N. F.

Anon.: A discussion of a revised formula for the preparation of the elixir of terpin hydrate.—N. A. R. D. J. 1916, v. 21, p. 1021.

ELIXIR TERPINI HYDRATIS CUM CODEINA, N. F.

Anon.: The usual dose of terpin hydrate is 5 grains, any less is of little value. Therefore, the only effect produced by the elixir, which contains 1 grain of terpin hydrate to the drachm, is due to the sedative action of the codeine sulphate.—J. Am. M. Assoc. 1916, v. 66, p. 1199.

ELIXIR TERPINI HYDRATIS ET DIACETYLMORPHINÆ, N. F.

Congdon, Leon A.: The sample of elixir of terpin hydrate and diacetylmorphine examined was rejected for being below standard.—Bull. Kansas Bd. Health, 1916, v. 12, p. 7.

ELIXIR VIBURNI OPULI COMPOSITUM, N. F.

Anon.: A discussion of two formulas for the preparation of the compound elixir of cramp bark.—N. A. R. D. J. 1916, v. 21, p. 1222.

Anon.: Notes on the preparation of the compound elixir of cramp bark, with a formula for preparing the same from crude drugs instead of fluid extracts.—N. A. R. D. J. 1916, v. 23, p. 12.

EMETINÆ HYDROCHLORIDUM.

Anon.: Emetine hydrochloride was added to the U. S. P. IX in view of the excitement created by the dental profession over its use in pyorrhea. The excitement has already died down and the demand is falling off, as it has not done all that was claimed for it.—Drug Topics, 1916, No. 9, p. 7.

Kolmer, John A., and Smith, Allen J.: A report of researches to determine the bactericidal and protozoacidal activity of emetine hydrochloride *in vitro* and *in vivo*.—J. Infec. Dis. 1916, v. 18, p. 247-276.

Pellini, E. J., and Wallace, G. B.: A report of researches on the pharmacology of emetine.—Am. J. M. Sc. 1916, v. 152, p. 325.

Levy and Rowntree: The toxicity of various commercial preparations of emetine hydrochloride.—Arch. Int. Med. 1916, v. 17, p. 420–433; see also Chem. Abstr. 1916, v. 10, p. 1676.

Kilgore, A. R.: A report of cases of peripheral neuritis following the administration of emetine in the treatment of amœbic dysentery.—Boston M. & S. J. 1916, v. 175, p. 380–382.

Bates, John Pelham: A discussion of the treatment of amœbic dysentery by the use of emetine.—J. Am. M. Assoc. 1916, v. 67, p. 345–347.

Editorial: A review of the use of emetine in the treatment of dysentry.—Prescriber, 1916, v. 10, p. 197.

Allan, J.: A report on the treatment of soldiers who have returned from the front with dysenteric symptoms, by the use of emetine hydrochloride.—Prescriber, 1916, v. 10, p. 105.

Lowell, Ralph P., and Cobb, Stephen A.: A comparative study of the value of emetine hydrochloride and mercury succinimid in the treatment of pyorrhea alveolaris.—Dental Cosmos, 1916, v. 58, p. 508–510.

Ruoff, K. H.: A report of the results obtained in 78 cases of pyorrhea treated with emetine hydrochloride. All of the cases

showed endamœbæ again in periods varying from two weeks to four months.—Am. J. Pharm. 1916, v. 88, p. 164.

Editorial: A discussion of the value of emetine in the treatment of psoriasis.—Prescriber, 1916, v. 10, p. 201.

Beckman, Marcus: An experimental study of the effect of emetinized blood on the typhoid bacillus.—Med. Rec. 1916, v. 89, p. 284; see also Chem. Abstr. 1916, v. 10, p. 1380.

Dale, H. H.: A note on the use of the double iodide of emetine and bismuth in the treatment of carriers of amœbic dysentery.—Lancet, 1916, v. 191, p. 183–184.

Dobell, Clifford: A report on the relative effectiveness of emetine hydrochloride and emetine bismuthous iodide in the elimination of *Endomœba hystolytica*.—Brit. M. J. 1916, v. 2, p. 612–616.

Low, George C., and Dobell, C.: Records are presented showing the superiority of emetine bismuthous iodide over emetine hydrochloride in the treatment of acute amœbiasis and carriers.—Lancet, 1916, v. 2, p. 319–320.

EMPLASTRA.

Dietrich: The use of plasters containing free resins is condemned since they irritate the epidermis. Formulas for the preparation of neutral plasters are given. An abstract.—J. pharm, et chim. 1916, v. 13, p. 54.

EMPLASTRUM BELLADONNÆ.

Scoville, Wilbur L.: No formula for the preparation of belladonna plaster is given in the U. S. P. IX because it can only be prepared on a commercial basis, special machinery and skill being necessary.—Bull. Pharm. 1916, v. 30, p. 363.

EMULSA.

Roon, Leo: A brief résumé of the developments in the theory of emulsification which might be of practical application and of general interest to the pharmacist. A bibliography is appended.—J. Am. Pharm. Assoc. 1916, v. 5, p. 496–505.

Barcroft, Wilder D.: A presentation of a theory of emulsification. Part 8.—J. Phys. Chem. 1916, v. 20, p. 1–31.

Fischer, M. H., and Hooker, M. O.: A study of emulsions of cottonseed oil in water.—Chem. Zentralbl. 1916, v. 2, p. 47.

De G. Peacock, Josiah C. and Bertha L.: A discussion of various methods for the preparation of emulsions of silver iodide.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 231–243; see also J. Am. Pharm. Assoc. 1916, v. 5, p. 727–734.

EMULSUM OLEI MORRHUÆ.

Kramer, S. P.: U. S. Patent No. 1,207,936. A method for emulsifying cod liver oil by means of a soluble silicate.—Chem. Abstr. 1917, v. 11, p. 276.

EMULSUM PHOSPHATICUM, N. F.

Anon.: The dropping of phosphatic emulsion is certainly a bad mark against the revision committee. Pharmacists should continue their active propaganda in behalf of it, for physicians like it and get good results from its use.—N. A. R. D. J. 1916, v. 22, p. 1305.

ERGOTA.

Roberts, J. G.: Of two lots of ergot examined, only one was of satisfactory physiological activity.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 112.

E'we, G. E.: Of two samples of ergot assayed, the cornutine content of one was above standard and one was below.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

Vanderkleed, C. E.: The cornutine content of the six lots of ergot examined was from 0.115 to 0.380 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 538.

EUONYMUS, N. F.

Anon.: A short note giving information relative to the production and collection of wahoo bark in America.—N. A. R. D. J. 1916, v. 21, p. 1114.

EUPATORIUM, N. F.

Anon.: Information relative to the cultivation and harvesting of boneset is given.—N. A. R. D. J. 1916, v. 23, p. 504–505.

EXTRACTA.

Diekman, George C.: The number of extracts in the Pharmacopœia has been reduced from 28 to 25. This number might have been still further reduced without materially interfering with the value of the work. It is regretted that so much prominence is given to powdered extracts, since they have been deprived of all volatile matter and therefore do not represent the constituents of the drug in all cases.—Pract. Drug. 1916, v. 34, No. 10, p. 24.

Anon.: A criticism of the U. S. P. directions for the preparation of extracts states that common sense would seem to indicate that when a drug contains a volatile oil such a drug is not fit to be represented in either the U. S. P. or N. F. by a powdered extract.—N. A. R. D. J. 1916, v. 23, p. 70.

Maines, E. L.: It is suggested that the next revision committee consider the advisability of adopting a uniform and definite relation of drug to extract for every commercial crude drug and that this list of standards be included in the text of the next Pharmacopœia for both solid and powdered extracts.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1067.

Anon.: A review of the U. S. P. IX states that the admission of the extracts of aconite, hydrastis, and viburnum prunifolium is unfortunate, since these preparations are superfluous.—J. Am. M. Assoc. 1916, v. 67, p. 764.

Lyubimenko, V.: A theory for the explanation of the change in color of green extracts. The color change is stated to be due to a disturbance of the equilibrium existing between the enzymes present, which results in the destruction of the green pigments. An abstract.—Pharm. J. 1916, v. 97, p. 505.

Heiduschka, A., and Schmid, J.: Data obtained from the estimation of sugar in some extracts and tinctures are presented. An abstract.—Pharm. Weekblad, 1916, v. 53, p. 1334.

EXTRACTUM CARNIS, N. F.

Lebbin: A paper dealing with the manufacture of beef extracts and with the chemical standards to which they should conform. An abstract.—Drug. Circ. 1916, v. 60, p. 407.

Vanderkleed, C. E., and E'we, G. E.: Directions for the application of the Wilfarth modification of the Kjeldahl method for the determination of nitrogen in the assay for protein in beef extract and wine of beef and iron.—J. Am. Pharm. Assoc. 1916, v. 5, p. 716.

Smith, W. B.: A description of a method for the estimation of sugar in meat products, particularly extracts.—J. Ind. & Eng. Chem. 1916, v. 8, p. 1024–1027.

Patch, E. L.: Samples of extract of beef examined showed a variation in protein content from 36.56 to 55 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 536.

EXTRACTUM VIBURNI PRUNIFOLII.

Anon.: The appearance of the extract of viburnum prunifolium in the U. S. P. IX will give a shock to the council of medicine and pharmacy of the A. M. A., who have condemned it as worthless.—Drug Topics, 1916, No. 9, p. 7.

FERRI PHOSPHAS SOLUBILIS.

Holmes, Harry M., and Rindfusz, R. E.: Researches on the preparation and properties of the colloidal arsenates and phosphates of iron.—J. Am. Chem. Soc. 1916, v. 38, p. 1970–1982.

FERRI SULPHAS EXSICCATUS.

Vanderkleed, C. E.: The $2FeSO_4.3H_2O$ content of 15 lots of dried ferrous sulphate examined ranged between 80 and 104.3 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 539.

FERRUM.

Mayer, J. L.: A description of a colorimetric method for the estimation of iron in pharmaceutical preparations, especially in wine of beef and iron.—Am. Drug. 1916, v. 60, p. 169.

van Eck, P. N.: A criticism of the *Codex Alimentarius* method for the colorimetric determination of iron as thiocyanate.—Pharm. Weekblad, 1916, v. 53, p. 1570–1572.

Brandt, L.: A discussion of the standardization with iron oxide as the basis for volumetric iron determinations in hydrochloric acid solutions.—Chem.-Ztg. 1916, v. 40, p. 605–607, 631–633.

Roberts, J. G.: The free iron (uncombined) in 25 samples of iron filings ranged from 22.9 per cent to 95.34 per cent.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 113.

Montgomery, Douglas W.: A note on the alliaceous odor produced by iron cacodylate. The disagreeable odor of the drug may become apparent in the breath even when given hypodermically.—J. Am. M. Assoc. 1916, v. 66, p. 491–492.

FERRUM REDUCTUM.

Stinson, Ray: Of 59 samples of reduced iron examined, 32 were below standard.—Proc. North Dakota Pharm. Assoc. 1916, p. 112.

Swift, E. G.: One sample of "iron by hydrogen" examined contained only 80 per cent of iron.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

FLUIDEXTRACTA.

Dickman, George C.: The number of fluid extracts in the Pharmacopœia has been reduced from 85 to 49. Good judgment is shown in the matter of deletions, the relatively unimportant members of this group having been dropped.—Pract. Drug. 1916, v. 34, No. 10, p. 24.

Anon.: In a review of the new U. S. P., it is stated that those interested in the promotion of rational therapy will regret the inclusion of a number of fluid extracts of violently toxic drugs, such as aconite and gelsemium (dose ½ minim each), belladonna root, digitalis, nux vomica and ipecac (dose 1 minim each), and lobelia (dose 2½ minims). The more diluted forms, the tinctures, of these drugs are preferable. The inclusion of such fluid extracts in the Pharmacopœia is playing into the hands of certain pharmaceutical manufacturers, who recommend that tinctures be prepared from fluid extracts—an unscientific procedure.—J. Am. M. Assoc. 1916, v. 67, p. 764.

Anon.: In a review of the preparations of the N. F. IV, it is stated that, from every practical and economical viewpoint it would be of inestimable value to the art of pharmacy if fluid extracts as a class were dropped as official preparations, and a new class of preparations to be called "50 per cent tinctures" be substituted in their place.—N. A. R. D. J. 1916, v. 23, p. 70.

Anon.: It is most sincerely hoped that before another revision of the U. S. P. and N. F. takes place (only three and one-half years hence) the pharmacists of the country will have become enlightened to such a degree as to demand the dismissal of the fluid extracts from their standards and their replacement with practical preparations.—N. A. R. D. J. 1916, v. 23, p. 510.

Francis, J. M.: If properly protected from light, contact with air, and the loss of alcohol, a normal activity may be expected for the fluid extracts of belladonna leaves or root, ipecac, nux vomica, and opium for a period of at least three years and in many cases for five or six years.—Am. Food J. 1916, v. 11, p. 408.

Congdon, Leon A.: Eight samples of fluid extracts examined were rejected for being in a deteriorated condition.—Rep. Kansas Bd. Health, 1916, p. 133.

FLUIDEXTRACTUM ACONITI.

Francis, J. M.: From experiments, it is concluded that the fluid extract of aconite retains at least 80 per cent of its activity for 12 months.—Am. Food J. 1916, v. 11, p. 408.

FLUIDEXTRACTUM CINCHONA.

Anon.: Pharmacists should bear in mind that the new formula for the fluid extract of cinchona contains diluted hydrochloric acid, and that the preparation is therefore incompatible with carbonates and bicarbonates. Physicians should be cautioned accordingly, as they very frequently prescribe mixtures of this kind.—N. A. R. D. J. 1916, v. 23, p. 510.

FLUIDEXTRACTUM COCÆ.

Caspari, Charles, jr.: The deterioration of all galenical preparations of coca leaves is beyond control in the light of our present knowledge concerning the chemistry of the latter.—Am. Food J. 1916, v. 11, p. 407.

FLUIDEXTRACTUM DIGITALIS.

Francis, J. M.: Samples of the fluid extract of digitalis were seen by the author which tested only 50 to 75 per cent of their normal activity after eight months. Other samples were 100 per cent active after three years.—Am. Food J. 1916, v. 11, p. 409.

FLUIDEXTRACTUM ERGOTÆ.

Francis, J. M.: Fluid extract of ergot may show only 50 per cent of its normal activity in six months. In some samples examined the activity was 100 per cent after five years. As a rule the preparation is open to suspicion after 18 months.—Am. Food J. 1916, v. 11, p. 409.

FLUIDEXTRACTUM HYDRASTIS.

Blomberg, J., jr.: A presentation of analytical data obtained in the evaluation of fluid extract of hydrastis prepared according to the method of the Ph. Ndl. IV, the supplement to the Ph. Ndl., the two methods of van der Haar, the method of the Ph. Germ. V, and the method of von Ledden-Hülsebosch.—Pharm. Weekblad, 1916, v. 53, p. 470-480.

van der Harr, A. W.: A note on the quantitative determination of hydrastine in fluid extract of hydrastis by Rusting's tragacanth method.—Pharm. Weekblad, 1916, v. 53, p. 1452-1454.

FLUIDEXTRACTUM IPECACUANHÆ.

Scoville, Wilbur L.: By some curious twist ipecac, U. S. P. IX, is required to yield not less than 1.75 per cent of ether-soluble alkaloids, while the fluid extract must yield not less than 1.8 per cent nor more than 2.2 per cent. The fluid extract thus represents about 113 per cent of the drug.—Bull. Pharm. 1916, v. 30, p. 363.

FLUIDEXTRACTUM NUCIS VOMICÆ.

McGill, A.: Of 19 samples of liquid extract of nux vomica examined, 12 were below the standard of the Ph. Brit. of 1914.—Bull. Lab. Inl. Rev. Dept. Canada, 1916, No. 342, p. 3.

FLUIDEXTRACTUM SABAL.

Griebel, C.: Data obtained in the analysis of the fluid extract of saw palmetto show that it contains ether-soluble fats, sodium chloride, esters of the fatty acids, chiefly of caprolic acid, fatty acids, invert sugar, and mannose.—Chem. Zentralbl. 1916, v. 2, p. 419, from Apoth.-Ztg. 1916, v. 31, p. 306.

FLUIDEXTRACTUM SENEGÆ.

Mueller, Bertha: A description of an improved method for the preparation of the fluid extract of senega.—Am. J. Pharm. 1916, v. 88, p. 241–243.

FLUIDEXTRACTUM VIBURNI OPULI, N. F.

Warren, L. E.: Analytical data showing the number of grams of solids per cubic centimeter of the fluid extract of viburnum opulus.—Rep. Chem. Lab. Am. M. Assoc. 1916, v. 9, p. 93–94.

FLUIDEXTRACTUM ZINGIBERIS.

Tice, William G.: Of seven samples of fluid extract of ginger examined, four were below standard.—Rep. New Jersey Dept. Health, 1916, p. 72.

FRAXINUS, N. F.

Anon.: A short note giving information relative to the production and collection of white-ash bark in America.—N. A. R. D. J. 1916, v. 21, p. 1114.

GAMBIR.

Holmes, E. M.: The name, *Ourouparia Gambir* (Hunter), Baillon is another instance of the useless alteration of names caused by the wretched application of the law of priority.—Pharm. J. 1916, v. 97, p. 485.

E'we, G. E.: One lot of gambir examined contained 64 per cent of alcohol-soluble matter instead of the 70 per cent required.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 112.

GELATINUM.

Powell, J. R.: An address on the chemical control of gelatin manufacturers.—J. Ind. & Eng. Chem. 1916, v. 8, p. 932–933.

Frerichs, G.: A criticism of the Ph. Germ. method of testing gelatin for sulphur dioxide. A more reliable method is described.—Chem. Zentralbl. 1916, v. 87, part 2, p. 283 from Apoth-Ztg. 1916, v. 31, p. 223.

Trunkel, Hans: Directions for the preparation of gelatin suitable for injections.—Pharm. Ztg. 1916, v. 61, p. 65 through Chem. Abstr. 1916, v. 10, p. 1076.

Wells, Albert H.: A report of investigations to determine the possibilities of using *gulaman dagat* as a substitute for gelatin in food and culture media.—Philippine J. Sc. 1916, v. 11, sec. a, p. 267–271.

Anon.: The use of animal gelatin as a food. Gelatin contains approximately the same amount of nitrogen as the more typical proteins, and yields most of the amino acids characteristic of this group of nutrients; but it does not contain the tyrosin, cystin, or tryptophan groups, all of which are now believed to be indispensable nitrogenous nutrient units for the body. For this reason when gelatin alone is supplied as the nitrogenous portion of the ration, nutritive failure ensues.—J. Am. M. Assoc. 1916, v. 66, p. 1880–1881.

GELSEMIUM.

Vanderkleed, C. E.: The alkaloidal content of the four samples of gelsemium examined ranged from 0.503 to 0.849 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 538.

GENTIANA.

Anon.: A short note giving information relative to the cultivation of gentian in America.—N. A. R. D. J. 1916, v. 21, p. 702.

Tunmann, O.: The michrochemistry of gentisin and the yellow coloring matter of *Frasera carolinensis*.—J. Chem. Soc. Lond. 1916, v. 110, p. 874 from Apoth.-Ztg. 1916, v. 31, p. 181–182.

GERANIUM, N. F.

Anon.: Information relative to the cultivation and harvesting of geranium is given.—N. A. R. D. J. 1916, v. 22, p. 674–675.

GLANDULÆ SUPRARENALES SICCÆ.

Ogata, A.: The color reaction which takes place when a dichromate is added to a solution of adrenalin is due to the reducing properties of the two ortho hydroxyl groups. The brown precipitate formed is chromium dioxide.—J. Pharm. Soc. Japan, 1916, No. 411, p. 387; see also Chem. Abstr. 1916, v. 10, p. 2386.

Luchsch, F.: A report of the effects of suprarenal feeding in small mammals, such as rats and mice.—Physiol. Abstr. 1916, v. 1, p. 313.

GLANDULÆ THYROIDÆ SICCÆ.

Griebel, C.: A description of a method for the detection of extract of bladderwrack when mixed with powdered thyroid glands. An abstract.—Pharm. Weekblad, 1916, v. 53, p. 1363.

Bradley, James: An article discussing the use of thyroid extract in the treatment of malignant uveitis.—J. Am. M. Assoc. 1916, v. 67, p. 412–413.

GLUCOSUM.

Anon.: It is good that we now have a U. S. P. standard for this widely used, but much abused, drug.—Drug Topics, 1916, No. 9, p. 7.

Wesener, J. A., and Teller, G. L.: A report of investigations on the chemical composition of commercial glucose and on its digestibility.—J. Ind. & Eng. Chem. 1916, v. 8, p. 1009–1020.

Jackson, Richard F.: Information concerning the saccharimetric normal weight and the specific rotation of d-glucose is given.—J. Washington Acad. Sci. 1916, v. 6, p. 530–531.

van der Linden, T.: A review of the literature on the decomposition products of glucose with additional data presented by the author.—Chem. Abstr. 1916, v. 10, p. 1604.

Powell, C. W. R.: A study of the action of alkalies on dextrose and levulose.—Chem. Abstr. 1916, v. 10, p. 172, from J. Chem. Soc. 1915, v. 107, p. 1335–1346.

Moore, G. A.: Notes on the extraction of glycerin from the waste lyes obtained in the manufacture of soap.—Am. Perf. 1916, v. 11, p. 262–263.

Wrisley, G. H.: Comments on the Krebitz process of soap making and glycerol recovery.—J. Ind. & Eng. Chem. 1916, v. 8, p. 733–743; see also Chem. Abstr. 1916, v. 10, p. 2411.

Anon.: General remarks on glycerin, including a table showing the effect of the water content on the specific gravity. Tests for determining the purity of glycerin are also given.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 226–228.

Neuberg, Carl and Mandel, J. A.: A description of a simple method for the detection of small quantities of glycerin. Likewise alcohols and acids of the carbohydrate series. An abstract.—Chem. Zentralbl. 1916, v. 87, part 1, p. 439–440.

Forman, Leroy: A description of a method for the quantitative determination of glycerin in tablets and confections. The data obtained in the analyses of a number of samples of these products are also given.—Pract. Drug. 1916, v. 34, No. 2, p. 37.

Scoville, Wilbur L.: Sunlight will decompose glycerin, forming aldehydes and other odorous substances. The decomposition is more rapid when glycerin is diluted with water.—Bull. Pharm. 1916, v. 30, p. 78.

Frary, Guy G.: All of the 29 samples of glycerin examined were passed. Five samples gave a brown color with H_2SO_4.—Rep. South Dakota F. & D. Com. 1916, No. 16, p. 142.

Anon.: Formulas for a number of glycerin substitutes are given.—Chem. & Drug. 1916, v. 88, p. 569 and 990.

E'we, G. E.: A substitute offered for glycerin consisted of a diluted glycerin thickened with a little gum and sugar and contained a little alcohol.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 112.

Langer, Alfons: Notes on the composition of various substitutes for glycerin.—Chem. Zentralbl. 1916, v. 87, part 2, p. 419 from Apoth.-Ztg. 1916, v. 31, p. 314–315, 342; see also A. Stephan, Chem. Zentralbl. 1916, v. 87, part 2, p. 514–515.

Lewinsohn, K.: Attention is directed to two cases in pharmaceutical practice in which perkaglycerol, prepared by Neuberg as a substitute for glycerol, was found inadequate.—Chem. Zentralbl. 1916, v. 87, part 2, p. 159 through Chem. Abstr. 1916, v. 11, p. 1880.

Dinkler and Schaumann: A report of investigations to determine to what extent "perkaglycerol" and other glycerin substitutes may

be used to replace glycerin in pharmaceutical practice.—Chem. Zentralbl. 1916, v. 87, part 2, p. 684.

Bonnet, M.: Clinical notes on the value of glycerin as dressing for boils. An abstract.—Pharm. J. 1916, v. 97, p. 7.

GLYCERITUM BISMUTHI, N. F.

Anon: The glycerite of bismuth could well have been omitted from the new N. F., as soluble bismuth salts and compounds are inferior medicaments for internal use; many physicians class them as distinctly injurious.—N. A. R. D. J. 1916, v. 23, p. 112.

GLYCERITUM PEPSINI, N. F.

Anon.: A greater pepsin content would improve the medicinal action of this preparation.—N. A. R. D. J. 1916, v. 23, p. 112.

GLYCYRRHIZA.

Parry, Ernest J.: The advisability of describing Spanish licorice as "also known as Italian, Levant, Persian, Turkish, or Arabian licorice" is questioned in view of the known differences existing between these commercial varieties.—Chem. & Drug. 1916, v. 88, No. 1913, p. 40.

Anon.: A short note giving information relative to the cultivation of licorice in America.—N. A. R. D. J. 1916, v. 21, p. 702.

Anon.: The amount of licorice root brought into the United States dropped from 100,100,000 pounds in 1914 to 47,800,000 pounds in 1915.—Com. Rep. 1916, No. 14, p. 243.

Anon.: According to the invoice certified at the American consulate, 8,899,520 pounds of licorice root were shipped from Russia to the United States during the year 1915.—Com. Rep. 1916, No. 59, p. 988.

Houseman, Percy A.: The constituents of licorice root, their isolation and properties.—Am. J. Pharm. 1916, v. 88, p. 97–105; see also Chem. Abstr. 1916, v. 10, p. 1252.

Linz, A.: A report of comparative investigations of 27 suggested methods for the determination of glycyrrhizin in licorice and in licorice products.—Chem. Zentralbl. 1916, v. 2, p. 202, from Arch. Pharm. 1916, v. 254, p. 134.

GOSSYPII CORTEX, N. F.

Anon.: A short note giving information relative to the production and collection of cotton root bark in America.—N. A. R. D. J. 1916, v. 21, p. 1114.

GOSSYPIUM PURIFICATUM.

Gerrard, A. W.: A comprehensive paper describing the preparation of absorbent cotton.—Pharm. J. 1916, v. 96, p. 573–574.

Lahache: A discussion on the evaluation of cotton and other materials used in the preparation of surgical dressings.—Répert. Pharm. 1916, v. 28, part 1, p. 4–11.

McCutcheon, Alexander: Sphagnum moss as a substitute for cotton. A detailed account of the harvesting of sphagnum moss and its preparation for use as a surgical dressing.—Pharm. J. 1916, v. 97, p. 587–589.

London letter: The vast demand for surgical dressings has led to the revival of the use of sphagnum moss, which was suggested long ago but had fallen into disuse. This material has three great advantages over absorbent cotton—cheapness, absorbency, and the fact that its preparation is so simple that it can be carried out entirely by unskilled workers. The moss is much more absorbent than cotton, and will take up about 12 times its weight in water.—J. Am. M. Assoc. 1916, v. 67, p. 1105.

Anon.: Notes on continental substitutes for absorbent cotton. Lignin, cellulose wadding, and bog moss are mentioned.—Pacific Pharm. 1916, v. 9, p. 316.

GRANATUM.

van Itallie, L.: Comments on the Ph. Ndl. method for the determination of total alkaloids in pomegranate bark.—Pharm. Weekblad, 1916, v. 53, p. 1661.

GUAIACOL.

Clampett, G. W.: Of five samples of guaiacol examined, the guaiacol content ranged from 40 to 90 per cent.—Proc. Texas Pharm. Assoc. 1916, p. 80.

Archetti, Andrea: Descriptions of some derivatives of guaiacol and their methods of preparation.—Boll. chim.-farm. 1916, v. 55, p. 649–655.

Davis, N. S.: The author recommends that liquids such as guaiacol and oil of sandalwood be prepared for administration by mixing them with wax and placing the mass in capsules.—J. Am. M. Assoc. 1916, v. 67, p. 1160.

GUAIACUM.

E'we, G. E.: Three of eleven lots of guaiac examined contained excessive alcohol-insoluble matter as follows: 25.2, 25.5, and 28.1 per cent, respectively. The U. S. P. allows 15 per cent.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 113.

Scoville, W. L.: The 14 samples of guaiac examined yielded alcohol-soluble matter in quantities varying from 70.3 to 97 per

cent. Four of the samples yielded less than 80 per cent, and 7 of them between 80 and 90 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 539.

Swift, E. G.: One sample of guaiac resin examined was found to be worthless, one contained 63.4 per cent of resin soluble in alcohol, and four of the samples yielded from 80 to 91.25 per cent of material soluble in alcohol.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

Vanderkleed, C. E.: The alcohol-solubility of the samples of guaiac examined ranged between 77.5 and 99.2 per cent, the ash content between 0.51 and 5.70 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 539.

GUARANA.

Anon.: The alkaloidal content of two samples of guarana assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

Swift, E. G.: One lot of guarana examined assayed 4.32 per cent of caffeine.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

HAMAMELIDIS CORTEX.

Anon.: A short note giving information relative to the production and collection of witch-hazel bark in America.—N. A. R. D. J. 1916, v. 21, p. 1058.

HEXAMETHYLENAMINA.

Marcussen, S.: A description of a method for the preparation of hexamethylenamine by the pharmacist.—Norges Apotek. Tidsskr. 1916, v. 24, p. 23–24.

Carles, P.: A summary of tests for the identity and purity of urotropin.—Répert. pharm. 1916, v. 28, part 1, p. 129–130; see also J. pharm. et chim. 1916, v. 13, p. 279–280.

Sugiura, K., and Falk, K. G.: A study of the compounds which urotropin forms with bromine and iodine show that a simple method for the evaluation of this compound may be based upon the formation of the tetraiodide.—Biochem. Bull. 1916, v. 5, p. 17–21; see also J. Pharmacol. & Exper. Therap. 1916, v. 8, p. 39–51.

Collins and Hanzlik: A colorimetric method for the estimation of free formaldehyde and hexamethylenamine.—J. Biol. Chem. 1916, v. 25, p. 231–237; see also Chem. Abstr. 1916, v. 10, p. 1988.

Erulkar, A. S.: An article discussing the use and abuse of hexamine.—Practitioner (The), 1916, v. 96, p. 405–408.

Hanzlik, Paul J.: A study of hexamethylenamine as a solvent, diuretic, and of its effect on the reaction of urine.—J. Lab. & Clin. Med. 1916, v. 1, p. 321–332; see also Ann. Rep. Therap. Res. Com. 1916, v. 5, p. 81–100.

Guthrie, Douglas: A note on the value of hexamethylenamine in aural suppuration and in meningitis.—Brit. M. J. 1916, v. 2, p. 455–456.

Anon.: It has been shown that hexamethylenamine has no germicidal activities, except in an acid medium. Therefore it is of special value only in infections of the pelvis of the kidney, ureters, bladder, and urethra when the urine is acid. It can not be expected to exert germicidal activity in the spinal fluid, which is alkaline, and hence is of no value in the treatment of anterior poliomyelitis.—J. Am. M. Assoc. 1916, v. 67, p. 309.

HYDRARGYRI CHLORIDUM CORROSIVUM.

Strickland, Donald K.: Laboratory notes on the quantitative determination of mercury in various pharmaceutical preparations containing the metal or its compounds.—J. Ind. & Eng. Chem. 1916, v. 8, p. 256–257.

Dulière: A method for the quantitative determination of mercuric chloride in surgical dressings which depends on the precipitation of the chloride with potassium iodide and redissolving the precipitate in an excess of the reagent is described. An abstract.—Drug. Circ. 1916, v. 60, p. 274.

Anon.: The volumetric determination of mercuric chloride by means of hydrazine sulphate. A description and discussion of the method.—Südd. Apoth.-Ztg. 1916, v. 55, p. 413.

Linhart, G. A.: Researches on the equilibria of mercuric chloride with other chlorides.—J. Am. Chem. Soc. 1916, v. 38, p. 1272–1280.

Brav, Aaron: A description of the effect of the accidental installation of a stock solution of corrosive sublimate into the conjunctival sack.—New York M. J. 1917, v. 106, p. 1027–1029.

Millar, A. F. W.: A report of a case of mercuric chloride poisoning by absorption from the vagina.—Brit. M. J. 1916, v. 2, p. 453–454.

Lewis, D. S., and Rivers, T. M.: A report of chemical studies in a case of bichloride poisoning.—J. H. Hosp. Bull. 1916, v. 27, p. 193–201.

Vogel, Karl M., and Lee, O. I.: Data relative to the elimination of mercury in bichloride poisoning is presented.—Med. Rec. 1916, v. 89, p. 58–60.

Cohen, Jacob, and Bernhard, Adolph: A report of a case of mercurial poisoning with recovery. The patient, a woman age 28, was treated according to the method outlined by Lambert and Patterson.—J. Am. M. Assoc. 1916, v. 66, p. 1019–1020.

Thorington, C.: A report of a case of mercuric chloride poisoning with recovery. The patient swallowed at 10.5 grain tablet.—Southern Med. J. 1916, v. 9, p. 1045.

Fantus, Bernard: An experimental study of antidotes in mercuric chloride poisoning.—J. Lab. & Clin. Med. 1916, v. 1, p. 879–894.

Anon.: In a reference to the use of calcium sulphide as an antidote for mercuric chloride poisoning, it is stated that J. H. Wilins, of Cincinnati, Ohio, was able to save the lives of animals when treatment was begun as late as 48 hours after the poison had been administered.—Canadian Pharm. J. 1916, v. 29, p. 436.

Nixon, P. I.: A note on a new method for the intravenous administration of mercuric chloride, with special reference to the prevention of vein obliteration.—J. Am. M. Assoc. 1916, v. 66, p. 1622.

Lambert, Robert A.: Data showing the comparative resistance of bacteria and human tissues to certain germicidal substances, including mercuric chloride.—J. Am. M. Assoc. 1916, v. 67, p. 1300–1301.

HYDRARGYRI CHLORIDUM MITE.

Boettger, W.: A report of experiments to determine the solubility of calomel in water. Also a description of a method for the determination of small amounts of mercury in solutions. An abstract.—J. Soc. Chem. Ind. 1916, v. 35, p. 144.

Strickland, Donald K.: Laboratory notes on the quantitative determination of calomel in various pharmaceutical preparations.—J. Ind. & Eng. Chem. 1916, v. 8, p. 254–256.

HYDRARGYRI IODIDUM FLAVUM.

Strickland, D. K.: A description of a method for the quantitative determination of mercuric iodide in various pharmaceutical preparations such as tablets and pills.—J. Ind. & Eng. Chem. 1916, v. 8, p. 253.

Hartley, E. G. J.: Descriptions of certain reactions produced by mercuric iodide.—J. Chem. Soc. Lond. 1916, v. 109, part 2, p. 1302–1305.

HYDRARGYRI IODIDUM RUBRUM.

Franceschi, Giambattista: A study of the action of hydrogen sulphide on mercuric iodide.—Boll. chim.-farm. 1916, v. 55, p. 481–483.

HYDRARGYRI SALICYLAS.

Murray, B. L.: A description of an electrolytic method for the determination of mercury in the salicylate of mercury.—J. Ind. & Eng. Chem. 1916, v. 8, p. 258.

Grignard and Abelmann, A.: A description of a new procedure for the simultaneous determination of carbon, hydrogen, and mercury in organic compounds containing mercury.—Bull. Soc. chim. France, 1916, v. 19 and 20, p. 25–27.

Zeigler, M.: A report of a case of the development of anaphylactic symptoms in a syphilitic produced by the intramuscular injection of mercury salicylate.—Med. Rec. 1916, v. 90, p. 805–807.

HYDRARGYRUM.

Anon.: "Mercurius Vivus" is the name under which quicksilver is official in the homeopathic pharmacopœias.—Drug. Circ. 1916, v. 60, p. 326.

Langston, C. E.: How war conditions have affected the output and price of mercury. In 1914 a flask of 75 pounds was quoted at $37.50 on the San Francisco market. In February, 1916, the same was quoted at $295.—Pacific Pharm. 1916, v. 9, p. 259–260.

Duschak, L. H., and Spencer, S. O.: An illustrated description of an improved mercury still.—J. Phys. Chem. 1917, v. 21, p. 311–313.

Adanti, G.: A volumetric method for the determination of mercury in its salts. The method is based on the reduction of the salts to metallic mercury by means of formic aldehyde in the presence of potassium hydroxide.—Boll. chim.-farm. 1916, v. 55, p. 553–554.

Minovici and Grozea, E.: A description of a method for the toxicological detection of mercury in which the metal is deposited on aluminum foil.—J. pharm. et chim. 1916, v. 13, p. 358.

E'we, G. E.: Several lots of mercury examined were quite dirty.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 114.

Perez, L.: Notes on the preparation of mercurial emulsions, mercurial pomades, oils, etc.—Farm. Espan. 1916, v. 48, p. 55–56.

Schamberg, Kolmer, and Raiziss: A study of the comparative toxicity of the various preparations of mercury. The toxicity of the various mercurial salts was found to be directly proportionate to the amount of mercury contained therein. The differences in the molecular structure of the compounds tested was found to be of little importance in relation to their toxicity.—J. Cutan. Dis. 1915, v. 33, p. 819–840; see also Chem. Abstr. 1916, v. 10, p. 2112; J. Am. M. Assoc. 1916, v. 66, p. 62.

Hall, Culbertson, and Slaught: An enumeration and discussion of the reactions resulting from the intraspinal injections of mercury.—J. Am. M. Assoc. 1916, v. 66, p. 2062–2063.

Zigler, M.: A report of a case of anaphylaxsis to mercury.—Med. Rec. 1916, v. 90, p. 805–807.

HYDRASTIS.

Sayre, L. E.: A description of a garden at Douglas, Mich., which yields over 500 pounds of hydrastis annually.—Drug Circ. 1916, v. 60, p. 601.

Anon.: In an academic dissertation at the University of Amsterdam, J. A. van Dongen states that *Erodium cicutarium*, a common

wild plant in Holland, is an excellent substitute for *Hydrastis canadensis* as a styptic in uterine haemorrhage.—Chem. & Drug. 1916, v. 88, No. 1875, p. 41; see also J. pharm. et chim. 1916, v. 13, p. 256.

De Waal, J. W.: Notes on the determination of hydrastine in hydrastis rhizome.—Pharm. Weekblad, 1916, v. 53, p. 1055–1061.

Lilly, J. K.: Ten lots of golden seal offered consisted of xanthorrhiza and twin-leaf roots. Serpentaria was also offered for golden seal.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

Nilsson: *Hydrastis canadensis* is frequently adulterated with the root of *Jeffersonia diphylla*, twin leaf. Methods for distinguishing the two are given. An abstract.—Drug Circ. 1916, v. 60, p. 19.

Table showing reported variation in alkaloidal content of hydrastis.

Reporters.	Number of samples.	Alkaloidal principles.		References.
		Minimum.	Maximum.	
Anon	10	2.15	5.59	Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.
Patch, E. L	3	3.2	4.2	J. Am. Pharm. Assoc. 1916, v. 5, p. 539.
Roberts, J. G	13	2.51	3.45	Proc. Pennsylvania Pharm. Assoc. 1916, p. 113.
Scoville, W. L	1		2.7	J. Am. Pharm. Assoc. 1916, v. 5, p. 539.
Swift, E. G	6	2.23	5.5	Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.
Vande kleed, C. E	5	3.16	5.39	J. Am. Pharm. Assoc. 1916, v. 5, p. 539.

Wendling, H.: A report of researches to determine the action of synthetic hydrastis preparations and of fluid extract of hydrastis on the uterus.—Zentralbl. Biochem. u. Biophys. 1915, v. 18, p. 214.

HYOSCYAMUS.

Demilly, Jean: Notes on the proper conditions for the cultivation of *Hyoscyamus niger*.—Bull. sc. pharmacol. 1916, v. 23, p. 330–332.

Rusby, H. H.: The present U. S. P. definition of hyoscyamus is a great improvement over that of the preceding edition, as the leaves are no longer required to be collected from the plants in their second year of growth, but may be collected at any time so long as they yield not less than 0.065 per cent of hyoscyamus alkaloids.—Drug. Circ. 1916, v. 60, p. 537.

Johannessen: A comparison of the methods of the Swiss, German, and Norwegian pharmacopœias for the evaluation of hyoscyamus and belladonna leaves. An abstract.—Pharm. Ztg. 1916, v. 61, p. 116.

Newcomb, E. L., and Haynes, M. H.: Notes concerning the moisture, ash, and alkaloidal content of hyoscyamus cultivated in Minnesota.—Northwestern Druggist (The), 1916, v. 17, No. 3, p. 35.

Barnes, J. H.: Assays of samples of *Hyoscyamus muticus* showed the alkaloidal content of the drug to range from 0.827 to 1.28 per

cent. The alkaloid was identified as hyoscyamine. An abstract Chem. & Drug. 1916, v. 77, p. 576.

Hughes: The author found the alkaloidal content of *Hyoscyamus muticus* of Egyptian origin to vary from 0.60 to 1.5 per cent, depending on stage of growth of the plant. An abstract.—C. U. C. P. Alumni J. 1916, v. 23, p. 232.

Vanderkleed, C. E.: Twenty lots of hyoscyamus yielded from 0.31 to 0.140 per cent of alkaloids.—J. Am. Pharm. Assoc. 1916, v. 5, p. 539.

E'we, G. E.: Of nine samples of hyoscyamus assayed, the mydriatic alkaloidal content of five was above standard and four below.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

Patch, E. L.: Two samples of hyoscyamus examined assayed 0.084 and 0.700 per cent of alkaloid, and yielded 27 and 35.8 per cent of ash, respectively.—J. Am. Pharm. Assoc. 1916, v. 5, p. 539.

Roberts, J. G.: The alkaloidal strength of two lots of hyoscyamus leaves examined was below the U. S. P. standard of 0.08 per cent. They contained 0.066 and 0.062 per cent, respectively, of mydriatic alkaloids, which is close to the standard of 0.065 per cent adopted for the U. S. P. IX.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 113.

HYPOPHYSIS SICCA.

Anon.: A list of references to recent articles on the pituitary body.—J. Am. M. Assoc. 1916, v. 66, p. 1734–1735.

Watenave, Walter K., and Crawford, Albert C.: From investigations, it is concluded that pituitary extracts, when prepared by certain methods, give color reactions which suggest the presence of epinephrine or an epinephrine-like compound.—Rep. Therap. Res. Com. 1916, v. 5, p. 62–75.

Fenger, Frederick: Researches on the composition and physiological activity of the pituitary body.—J. Biol. Chem. 1916, v. 25, p. 417–422.

Robertson, T. B.: A description of a method for isolating the growth-controlling principle (tethelin) from the anterior lobe of the pituitary body. Also a discussion of its physical, chemical, and physiological properties.—J. Am. M. Assoc. 1916, v. 66, p. 1009–1011.

Goetsch, E.: The influence of pituitary feeding on growth and sexual development. The dried powdered pituitary extract derived from both the anterior and posterior lobes of the gland when fed to young rats in excessive doses (0.1 gm. daily) caused failure to gain in weight, loss of appetite, increasing peristalsis, a mild enteritis, and certain nervous manifestations, such as muscular tremors and weakness of the hind limbs.—J. Am. M. Assoc. 1916, v. 66, p. 690.

Anon.: A report of experiments to determine the effect of pituitary substance on the fecundity of poultry. An abstract.—Mulford's Vet. Bull. 1916, v. 7, p. 92–95.

INFUSUM DIGITALIS.

Dickman, George C.: The change in the formula for the preparation of the infusion of digitalis as given in the new U. S. P. is desirable, since the pharmacist will no longer be able to dispense an old deteriorated product.—Pract. Drug. 1916, v. 34, No. 10, p. 26.

Maloy, W. J.: A discussion of the various methods for the preparation of the infusion of digitalis.—Proc. Florida Pharm. Assoc. 1916, p. 15–18.

Stall, George A.: A modified U. S. P. method for preparing the infusion of digitalis is described. The author states that a better preparation will be obtained if the infusion jar is heated before pouring in the boiling water.—Pract. Drug. 1916, No. 5, p. 27.

INFUSUM SENNÆ COMPOSITUM.

Anon.: Detailed directions for the preparation of the infusion of senna compound are given.—N. A. R. D. J. 1916, v. 21, p. 659.

Brocksmit, T. C. N.: The addition of 80 milligrams of thymol to 100 grams of the infusion of senna is recommended as a preservative.—Pharm. Weekblad, 1916, v. 53, p. 1600–1602.

INUNCTUM MENTHOLIS COMPOSITUM, N. F.

Anon.: The name "ointment" would have been far more preferable and correct for this preparation. While the word "inunction" is a noun, it has reference to the "rubbing of ointment" on the body or elsewhere, and, correctly speaking, there can be no such a thing as a generic inunction of anything.—N. A. R. D. J. 1916, v. 23, p. 112.

IODOFORMUM.

von Bonsdorff, A.: A report of a fatal case of iodoform poisoning after intrapleural injection.—J. Am. M. Assoc. 1916, v. 67, p. 1052, from Finska Lakaresallskapets Handlingar, 1916, v. 58, No. 7.

IODUM.

van Itallie, L., and van der Zande, J.: From the results obtained in the estimation of the amount of iodine in *Zostera marina*, it is concluded that, technically, iodine can not be produced from seaweeds. Pharm. Weekblad, 1916, v. 53, p. 705–708.

Anon.: The Russian colonization department has appropriated $60,000 for the erection of a plant at Nahodaka Bay to recover iodine from seaweed.—Chem. & Drug. 1916, v. 88, p. 953.

Forbes, E. B., et al.: Analytical data showing the iodine content of various foods.—J. Med. Research, 1916, v. 34, p. 445–458.

Guichard, Marcel: A new method for the determination of the atomic weight of iodine. The method is based on the analysis of I_2O_5.—Ann. chim. applicata, 1916, v. 6, p. 279–318.

Bordier, H., and Roy, G.: Experimental notes on colloidal iodine and its properties.—Compt. rend. acad. sc. 1916, v. 163, p. 567–569.

Foque, Gustav: An illustrated description of an apparatus for the sublimation and weighing of small quantities of iodine.—Bull. soc. chim. France, 1916, v. 19 and 20, p. 270–272.

Bigg, Edward: A description of a method for the preparation of "nascent" iodine for use in the treatment of tuberculosis.—Brit. M. J. 1916, v. 2, p. 256–257.

Edgar, G., and Diggs, S. H.: Data showing the rate of diffusion of iodine in solutions of potassium iodide.—J. Am. Chem. Soc. 1916, v. 38, p. 253.

Smith, S. W. J.: A description of a method of exhibiting the velocity of iodine ions in solution.—Chem. Abstr. 1916, v. 10, p. 1956, from Proc. Phys. Soc. Lond. 1916, v. 28, p. 157–161.

Rupp, E., and Lehmann, F.: A description of a new method for the determination of iodine in organic preparations.—Chem. Abstr. 1916, v. 10, p. 1308, from Arch. Pharm. 1916, v. 253, p. 433–435.

Krauss, Robert B.: A method for the electrolytic determination of iodine when present in organic matter is described.—J. Biol. Chem. 1916, v. 24, p. 321–325.

Hill, J. Rutherford: A discussion of the incompatibility resulting from the prescribing of iodine and sodium salicylate in the same mixture.—Pharm. J. 1916, v. 96, p. 397.

Robinson, W. J.: The author cites a case in which a physician prescribed argyrol, potassium iodide, and iodine to be dispensed in the same aqueous solution. The argyrol was completely decomposed, the silver being precipitated as the iodide.—Drug. Circ. 1916, v. 60, p. 337.

Davis, N. S.: Iodine may be incorporated with a wax mass and given in capsules with as good results as when given in solution.—J. Am. M. Assoc. 1916, v. 67, p. 1160.

Sollmann, Torald: A report of researches to determine the effect of iodine, iodides, and iodates on the body.—J. Pharmacol. & Exper. Therap. 1916, v. 9, p. 269–278.

Salant, William, and Livingston, A. E.: A study of the influence of iodine and sodium iodide on the circulation.—Am. J. Physiol. 1916, v. 41, p. 234–249.

Maylard, A. E.: A note calling attention to the danger of iodine solutions for sterilizing the skin in abdominal operations.—Brit. M. J. 1916, v. 2, p. 75.

MacConkey, A. T., and Zilva, S. S.: A presentation of experimental data relative to the value of iodine in tetanus.—Brit. M. J. 1916, v. 1, p. 411–413.

IPECACUANHA.

Xrayser: A short discourse on the derivation of the name "ipecacuanha," and on the sources of the drug. An abstract.—Am. Drug. 1916, v. 64, p. 173.

Rusby, H. H.: Suggestions for changes in the definition of ipecac as given in the new U. S. P. The present definition is stated to be a combination of errors.—Drug. Circ. 1916, v. 60, p. 202.

Rusby, H. H.: The presence of stems detached from the roots, as specified in the U. S. P. IX under ipecac, can not possibly serve any good purpose and is certain to encourage adulteration up to the limit. This adulteration is not necessarily restricted to the stems of the same plant, which is the most unfortunate feature of the case.—Drug. Circ. 1916, v. 60, p. 537.

Rusby, H. H.: Ipecac must now contain not less than 1.75 instead of 2 per cent of alkaloid. This change is not included in the table of the introduction, comprising 13 pages, and intended to include all such changes in the strength of drugs and preparations.—Drug. Circ. 1916, v. 60, p. 538.

Karrer, P.: Researches on the constitution of the alkaloids of ipecac.—J. Soc. Chem. Ind. 1916, v. 35, p. 177, from Ber. deutsch. chem. Gessellsch. 1916, v. 49, p. 2057–2079.

Lloyd, John Uri: A description of the physical and chemical properties of kryptonine, a constituent of ipecac. The substance possesses alkaloidal properties. Its composition is probably represented by the formula $C_{28}H_{40}N_2O_2$.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1053–1064.

Allan, William: Clinical notes on the use of "alcresta ipecac" in the treatment of amœbic dysentery.—Am. J. Trop. Dis. 1916, v. 3, p. 602–606.

Table showing reported variation in alkaloidal content of ipecac.

Reporters.	Number of samples.	Per cent of alkaloids.		References.
		Minimum.	Maximum.	
Anon	10	1.8	2.28	Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.
Patch, E. L.	4	1.71	2.28	J. Am. Pharm. Assoc. 1916, v. 5, p. 539.
Roberts, J. G.	12	1.78	1.97	Proc. Pennsylvania Pharm. Assoc. 1916, p. 113.
Scoville, W. L.	1	.....	1.67	J. Am. Pharm. Assoc. 1916, v. 5, p. 539.
Swift, E. G.	16	0	2.68	Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.
Vanderkleed, C. E.	9	1.66	2.13	J. Am. Pharm. Assoc. 1916, v. 5, p. 539.

JALAPA.

Holmes, E. M., and Passmore, F. W.: As a source of jalapin (resin of jalap insoluble in ether), the Brazilian jalap is twice as valuable as the Vera Cruz jalap, since it contains twice the standard quantity of resin required by the Ph. Brit.—Pharm. J. 1916, v. 41, p. 671.

Tunmann, O.: A paper dealing with the sophistication of powdered jalap with the seed hulls of *Attalea cohune* Mart. and the results obtained in microchemical investigations.—Chem. Zentralbl. 1916, v. 87, part 2, p. 268, from Apoth-Ztg. 1916, v. 31, p. 263, 267–268, 273–274.

E'we, G. E.: Of three samples of jalap assayed, the total resin content of one was above standard and two below.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

Swift, E. G.: Of nine samples of jalap received in the latter half of 1915, five yielded less than 6 per cent of total resins, three between 6 and 7 per cent, one 7.29 per cent, and one 10.21 per cent. In 1916 the poorest sample yielded 8.5 per cent of resin and the best 11.05 per cent.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

Vanderkleed, C. E.: One sample of jalap examined contained 7.17 per cent of resin. The standard is 7 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 539.

JUGLANS, N. F.

Anon.: A short note giving information relative to the production and collection of butternut bark in America.—N. A. R. D. J. 1916, v. 21, p. 917.

KAOLINUM, N. F.

Wiley, Samuel H.: A consular report calls attention to large deposits of kaolin in Paraguay.—Com. Rep. 1916, No. 200, p. 746.

Hess, Alfred F.: Kaolin and fullers' earth, while usually considered synonymous, have different compositions, as shown by the following table:

	SiO_2.	Al_2O_3.	Fe_2O_3.	CaO.	MgO.	Alkalies.	Water.
Kaolin	45.40	37.34	1.92	0.41	0.20	0.52	14.0
Fullers' earth	57.26	18.33	1.87	2.58	1.06	.....	18.4

J. Am. M. Assoc. 1916, v. 66, p. 106–107.

Lloyd, John Uri: An account of the discovery of the alkaloidal affinities of hydrous aluminum silicate.—J. Am. Pharm. Assoc. 1916, v. 5, p. 381–390, 490–495.

Rapp: A description of a method for testing the power of bolus alba to absorb water.—Chem. Zentralbl. 1916, v. 87, part 2, p. 349.

E'we, G. E.: One lot, labeled "Terra Alba," consisted of calcium sulphate.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 118.

Rappaport, V.: Further observations on the use of kaolin to remove diphtheria bacilli from the nose and throat.—J. Am. M. Assoc. 1916, v. 66, p. 943–945.

KAVA, N. F.

Murakami, S.: According to Winzheimer, the crystallin constituents of kava are 0.3 per cent metisticin, 0.268 per cent ψ-metisticin, and 0.184 yangonin. The author finds the relative proportions reversed.—J. Pharm. Soc. Japan, 1916, No. 411, p. 393; see also Chem. Abstr. 1916, v. 10, p. 2386.

KINO.

Memminger, Lucien: A consular report dealing with the production of kino in northern Malabar.—Com. Rep. 1916, No. 227, p. 1178–1179.

KOLA, N. F.

Anon.: The alkaloidal content of 10 samples of kola nuts, dried, assayed from 1.34 to 2.4 per cent of alkaloids.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

Roberts, J. G.: One lot of kola nut examined contained 1.44 per cent of alkaloids.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 114.

Swift, E. G.: Two samples of kola examined assayed 1.79 and 1.94 per cent of caffeine, respectively.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

Vanderkleed, C. E.: The caffeine content of 10 lots of kola examined ranged between 1.4 and 2.02 per cent. The average was 1.582 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 540.

LAC FERMENTATUM, N. F.

Anon.: Only fresh cow's milk should be used in preparing kumyss, as pasteurized milk does not yield a very good product.—N. A. R. D. J. 1916, v. 23, p. 150.

Chouttinene, Anterro: Results obtained in determinations of the acidity of fermented milk indicate that a standard solution of potassium hydroxide is the most suitable for titration.—J. pharm. et chim. 1916, v. 14, p. 112, from Pharmazevtizeski J. 1916, p. 110.

LAC VACCINUM, N. F.

Goldby, F.: A note calling attention to a so-called "synthetic" milk which is assumed to be an emulsion prepared from the soya bean.—Pharm. J. 1916, v. 97, p. 214.

Barthelow, Paul: A history of condensed milk with a note on its therapeutic uses.—Med. Rec. 1916, v. 90, p. 284–286.

Anon.: According to a German patent, sugar-free milk is prepared by dialyzing homogenized milk in thin layers at a temperature of about 60° C. An abstract.—Pharm. Weekblad, 1916, v. 53, p. 203.

Bosworth, Alfred W., and Van Slyke, Lucius L.: A comparison of the composition of cow's milk, goat's milk, and human milk.—J. Biol. Chem. 1916, v. 24, p. 187–189.

Van Slyke, Lucius L., and Bosworth, Alfred W.: A study of the chemical changes which take place in the souring of milk.—J. Biol. Chem. 1916, v. 24, p. 191–202.

Ackermann, Ed.: Some new contributions pertaining to the analysis of milk.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 573–578.

Pégurier, G.: A scheme for the rapid examination of milk in the field.—Répert. pharm. 1916, v. 28, part 1, p. 1–3.

Koning, C. J., and Mooij, W. C.: A presentation of analytical data obtained in the examination of milk, and comments thereon.—Pharm. Weekblad, 1916, v. 53, p. 25–33, 50–59.

Hersey, C. B.: A comparison of methods for the estimation of casein in milk.—J. Ind. & Eng. Chem. 1916, v. 8, p. 335–336; see also Analyst (The), 1916, v. 41, p. 203.

Osborne, Thomas B., and Wakeman, Alfred J.: A report of an experimental study to determine the distribution of the phosphatides in milk.—J. Biol. Chem. 1916, v. 28, p. 1–9.

van der Harst, J. C., and Koers, C. H.: Data showing the effect of the presence of goat's milk on the physical and chemical constants of cow's milk.—Pharm. Weekblad, 1916, v. 53, p. 1551–1553.

Kolthoff, I. M.: Comments on the tests for the presence of alcohol in milk.—Pharm. Weekblad, 1916, v. 53, p. 1589–1600.

Kolthoff, I. M.: Notes on the detection of preservatives and coloring matter in milk.—Pharm. Weekblad, 1916, v. 53, p. 1609–1618.

Hinks: Notes on the persistence of hydrogen dioxide in milk. A case is cited in which 0.2 per cent added to fresh milk was still present after 18 months.—Drug. Circ. 1916, v. 60, p. 702.

Grimmer, W.: A description of a new procedure for carrying out the peroxidase reaction in milk. An abstract.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 125–126.

Campbell, H. C.: Notes on the value of the sediment test as an indication of the number of bacteria present in milk. From experiments, the author concludes that there is no relation between the sediment or dirt collected and the number of bacteria present. An abstract.—Pharm. J. 1916, v. 97, p. 463.

Frost, William D.: A comparison of a rapid method of counting bacteria in milk with the standard plate method.—J. Infec. Dis. 1916, v. 19, p. 273–287.

Anon.: Provisional report of the laboratory section of the American Public Health Association on standard methods for the bac-

teriological analysis of milk.—Am. J. Public Health, 1916, v. 6, p. 1315–1325.

Anon.: The addition of lime water to cow's milk for infant feeding is unnecessary, as investigations by Holt have shown the presence of a large excess of calcium salts in the milk itself.—J. Am. M. Assoc. 1916, v. 67, p. 1318.

LAPPA, N. F.

Roberts, J. G.: A shipment of tough, woody, old burdock root breaking with an uneven fracture was rejected, as only root collected from plants of the first year's growth is desired.—Proc. Pennsylvania Pharm. Assoc. 1916.

Patch, E. L.: One lot of burdock root examined yielded 20.8 per cent of ash. Usually the yield is from 7 to 10.5 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 537.

LEPTANDRA, N. F.

Anon.: Information relative to the cultivation and collection of Culver's root is given.—N. A. R. D. J. 1916, v. 23, p. 234–238.

LIMONIS CORTEX.

Holmes, E. M.: The source of lemon peel is given as *Citrus medica Limonum* (*Risso*). Hook. f. Linnæus is, however, responsible for the name *Medica*, which is usually spelled with a capital initial letter, the adjective being a proper one, and refers to the fact that the lemon is supposed to have been a native of Media.—Pharm. J. 1916, v. 97, p. 485.

LINIMENTA.

Tice, William G.: Of eight samples of different liniments examined, two were below standard.—Rep. New Jersey Dept. Health, 1916, p. 72.

LINIMENTUM CAMPHORÆ.

Anon.: A description of a simple method for the determination of the camphor content of camphor liniment.—Apothecary, 1916, v. 13, No. 2, p. 36.

Gregory, Willis G.: Data showing the camphor content of a number of samples of camphor liniment prepared by pharmacy students at the University of Buffalo.—Proc. New York Pharm. Assoc. 1916, p. 250–251.

Lea, E. J.: A variation of from 50 to 100 per cent from the U. S. P. standard was noted in samples of camphorated oil examined.—Bull. California Bd. Health, 1916, v. 12, p. 48.

Anon.: A correspondent cites a case of poisoning in which a child two years of age was given a teaspoonful of camphor liniment in mistake for castor oil. It is suggested that this preparation be labeled "poison."—Drug. Circ., 1916, v. 60, p. 85.

Table showing some of the analytical results reported for camphor liniment.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Anon.	9	4	Bull. Vermont Bd. Health, 1916, v. 17, No. 2.
Casey, F. W.	6	1	Bull. Michigan D. & F. Dept., 1916, No. 252–255, p. 19.
Lea, E. J.	9	7	Bull. California Bd. Health, 1916, v. 11, p. 648; v. 12, p. 220.
Stinson, Ray	36	17	Proc. North Dakota Pharm. Assoc., 1916, p. 111.
Todd, A. R.	14	4	Bull. Mich D. & F. Dept., 1916, No. 244–247, p. 20; No. 250–251, p. 16.

LINIMENTUM SAPONIS.

Anon.: The solidification of soap liniment frequently complained of is due to the use of castile soap in bars which contains a large proportion of water. This necessitates the use of a smaller amount of alcohol, and solidification either partly or wholly is the result.—N. A. R. D. J. 1916, v. 23, p. 193.

Anon.: A number of samples of soap liniment recently examined for alcohol content in the Mulford Analytical Laboratories gave the following results upon plain distillation by the U. S. P. method: 99.0, 97.7, 97.3 and 99.9 per cent. The volatile oil which distills over with the alcohol apparently has but little effect upon the ultimate result.—Drug. Circ. 1917, v. 61, No. 9, p. 29.

LIQUORES.

Dickman, George C.: Three solutions have been added to the U. S. P. and three have been deleted. A further reduction in the number of official liquors might have been made without seriously interfering with the value of the Pharmacopœia.—Pract. Drug. 1916, v. 34, No. 10, p. 25.

Schneider, Albert: Locke's, Adler's, and Fischer's solutions should have been introduced into the U. S. P., as they are required and extensively used in hospital as well as private practice and in biological experiments and laboratory work.—Drug. Circ. 1916, v. 60, p. 693.

Penfold, Frederick: Some suggestions for improvements in the Ph. Brit. method of preparing Liquor Bismuthi et Ammonii Citratis.—Pharm. J. 1916, v. 97, p. 567–570.

Anon.: A short description of Gordon Surr's method for diluting solutions to definite specific gravity.—Drug Topics, 1916, v. 31, No. 7, p. 16–17.

Zotier, V.: General formulas for the preparation of isotonic solutions are presented.—Bull. sc. pharmacol. 1916, v. 23, p. 219–225.

Becker, M.: A paper dealing with the history and methods of preparation of intravenous solutions.—J. Am. Pharm. Assoc. 1916, v. 5, p. 846.

Neilsen, C. O.: A method for the preparation of Liquor Ferri Caseinati, based on careful experiments, is described. An abstract.—Norges Apotek. Tidsskr. 1916, v. 24, p. 201–204.

Burmann, James, jr.: Notes on the use of the Ringer-Locke serum for the preparation of stable medicinal solutions.—Chem. Abstr. 1916, v. 10, p. 2614.

Meunier, L.: A presentation of experimental data showing the advisability of employing isotonic solutions in the administration of medicines by mouth. An abstract.—Pharm. J. 1916, v. 97, p. 569.

LIQUOR ALUMINI ACETATIS, N. F.

Anon.: A working formula for the preparation of the solution of aluminum acetate is given.—N. A. R. D. J. 1916, v. 21, p. 763.

Anon.: If the solution of aluminum acetate is properly prepared, the lead should be completely precipitated, as the lead sulphate formed is practically insoluble and a calculated excess of aluminum sulphate is directed to be employed. There should, therefore, be but slight danger from lead poisoning following the use of this solution.—J. Am. M. Assoc. 1916, v. 67, p. 1035.

Anon.: A discussion of the treatment of burns by the use of aluminum acetate and subacetate.—J. Am. M. Assoc. 1916, v. 67, p. 829.

LIQUOR ANTISEPTICUS, N. F.

Anon.: The old formula for antiseptic solution was better than that of the N. F. IV, and it is feared that the revised formula will not meet with the approval of physicians generally.—N. A. R. D. J. 1916, v. 23, p. 150.

Anon.: In order to produce an antiseptic solution which will be uniform at all times, it is suggested that the pharmacist keep on hand a stock solution of the thymol and volatile oils in alcohol. The quantities of the materials in this solution are such that 15 mils are to be used in preparing a thousand mils of antiseptic solution.—N. A. R. D. J. 1916, v. 21, p. 861.

LIQUOR ANTISEPTICUS ALKALINUS, N. F.

Anon.: A discussion of modified formulas for the preparation of alkaline antiseptic solution.—N. A. R. D. J. 1916, v. 21, p. 1121.

Anon.: A far better preparation would have resulted if the oil of peppermint and methyl salicylate had been replaced with 10 grams of sodium chloride.—N. A. R. D. J. 1916, v. 23, p. 151.

LIQUOR ARSENI ET HYDRARGYRI IODIDI.

Rosin, Joseph: Experimental data are presented showing the rate of oxidation of the arsenous iodide in Donovan's solution and its bearing on the U. S. P. assay method.—J. Am. Pharm. Assoc. 1917, v. 6, p. 951–952.

LIQUOR AURI ET ARSENI BROMIDI, N. F.

Anon.: The following precaution to be observed in the preparation of the solution of bromide of gold and arsenic is recommended for the new edition of the N. F.: "If a fume chamber is not accessible, the disagreeable and injurious effects of the bromine upon the mucous membrane of the operator may be largely prevented by placing around him several shallow vessels containing a weak solution of ammonia."—N. A. R. D. J. 1916, v. 21, p. 1065.

LIQUOR CALCIS.

Hostmann, Jeannot: A note on the contamination of limewater with sulphide as a result of the use of red rubber tubing in siphoning off the limewater from the container.—C. U. C. P. Alumni J. 1916, v. 23, p. 5.

Anon.: Of a total of 59 samples of limewater examined, 6 were found to be below standard.—Proc. Maryland Pharm. Assoc. 1916, p. 84–94.

Anon.: Of 13 samples of limewater examined, 1 was below standard.—Proc. Minnesota Pharm. Assoc. 1916, p. 211.

Hostmann, Jeannot: Four of 20 samples of limewater examined were low in calcium hydroxide content.—Proc. New Jersey Pharm. Assoc. 1916, p. 78.

Sayre, L. E.: Of four samples of limewater examined, one was adulterated.—Bull. Kansas Bd. Health, 1916, p. 12.

LIQUOR CALCIS SULPHURATÆ, N. F.

Chapin, R. N.: Descriptions of new methods for the analysis of lime-sulphur solutions.—J. Ind. & Eng. Chem. 1916, v. 8, p. 151–156; see also Analyst (The), 1916, v. 41, p. 184–186.

LIQUOR CHLORI COMPOSITUS, N. F.

Race, Joseph: On the use of calcium hypochlorite and ammonium oxalate for the chlorination of water.—Lancet, 1916, v. 191, p. 71–72.

Hallvorson, M. B.: Clinical notes on the use of compound solution of chlorine in the treatment of pneumonia and tuberculosis.—Journal-Lancet, 1916, v. 36, p. 596–600.

LIQUOR CRESOLIS COMPOSITUS.

Anon.: Notes on the preparation of compound solution of cresol.—N. A. R. D. J. 1916, v. 22, p. 480–481.

Richter: A formula for the preparation of the compound solution without the formation of glycerol is described. Instead of linseed oil, fatty acids are used. An abstract.—Drug. Circ. 1916, v. 60, p. 211.

Keulemans, N.: A note on the quantitative determination of cresol in the compound solution of cresol.—Pharm. Weekblad, 1916, v. 53, p. 259.

Vivario, R.: Data showing the comparative bactericidal powers of compound solution of cresol prepared according to the methods given in the different pharmacopœias.—Pharm. Weekblad, 1916, v. 53, p. 629–631.

LIQUOR FERRI ALBUMINATA, N. F.

Anon.: Notes on the preparation of solution of iron albuminate with suggestions for changes in the N. F. formula.—N. A. R. D. J. 1916, v. 21, p. 1279.

Cook, E. Fullerton: Instead of using the dry and usually bad smelling albuminate in the preparation of the solution of iron albuminate, fresh egg albumin is used, and thus the unpleasant odor often noticed in this preparation has been eliminated.—Drug. Circ. 1916, v. 60, p. 542.

LIQUOR FERRI CHLORIDI.

Carlson, C. E.: A report of investigations on the preparation and preservation of the solution of ferric chloride and the alcoholic solution of ferric chloride.—Svensk farm. Tidskr. 1916, v. 20, p. 134–135, 153–155.

LIQUOR FERRI ET AMMONII ACETATIS.

Anon.: Explanatory notes on the preparation of solution of iron and ammonium acetate.—N. A. R. D. J. 1916, v. 22, p. 273–274.

Wood, H. C., jr.: In a discussion on the misuse of Basham's mixture in the treatment of Bright's disease, the author states that the attempt to justify the use of this solution in nephritis on the ground of its adding the diuretic effect of the ammonium acetate to the chalybeate action of the iron verges on sophistry.—J. Am. M. Assoc. 1916, v. 66, p. 1071–1072.

LIQUOR FERRI PEPTONATI, N. F.

Lami, Pio: A description of a method for preparing peptonate of iron for hypodermic medication.—Boll. chim.-farm. 1916, v. 55, p. 359–360.

LIQUOR FERRI PEPTONATI ET MANGANI, N. F.

Anon.: In commenting on the N. F. directions for the preparation of solution of peptonate of iron and manganese, it is stated that there appears to be a discrepancy in that the amount of sodium hydroxide to be dissolved in 9 parts of water is not specified. The amount of flavoring, especially of vanillin, is thought to be exceptionally small.—N. A. R. D. J. 1916, v. 23, p. 413–415.

Anon.: Directions for making the solution of iron peptonate with manganese according to the method suggested by McElhenie are given. Several other formulas are also discussed.—N. A. R. D. J. 1916, v. 21, p. 963–964.

LIQUOR FORMALDEHYDI.

Anon.: Formaldehyde, its manufacture and applications in pharmacy.—Farm. Españ. 1916, v. 48, p. 176–179, 193–196.

Vanderkleed, C. R., and E'we, G. E.: Experiments with the U. S. P. assay method for formaldehyde indicate that 30 minutes is too short a time to allow the mixture of solution of formaldehyde, hydrogen peroxide, and normal alkali to stand, as oxidation is not complete in this period. A better plan is to allow the mixture to stand until no more gas bubbles are noticed on shaking, which occurs after an hour or two.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 277; see also J. Am. Pharm. Assoc. 1916, v. 5, p. 713–714.

Collins, R. J., and Hanzlik, P. J.: A description of a colorimetric method for the estimation of free formaldehyde and hexamethylenamine. Jorissen's phloroglucinol reagent is employed.—J. Biol. Chem. 1916, v. 25, p. 231–237.

Kunz, Herman: Analytical data showing the amount of copper present in formaldehyde solutions prepared by the use of a copper spiral catalyser.—Apoth.-Ztg. 1916, v. 31, p. 66–67.

McGill, A.: Of 68 samples of formalin examined, 4 were below standard.—Bull. Lab. Inl. Rev. Dept. Canada, 1916, No. 333, p. 5.

Patch, E. L.: One lot of solution of formaldehyde examined contained copper.—J. Am. Pharm. Assoc. 1916, v. 5, p. 538.

Roberts, J. G.: Only two of nine lots of liquor formaldehyde examined complied with the U. S. P. specific gravity requirement of 1.075 to 1.081; they were all high and showed specific gravities ranging from 1.082 to 1.099.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 114.

Todd, A. R.: Of 11 samples of formaldehyde examined, 4 were rejected.—Bull. Michigan D. & F. Dept. 1916, No 244–247, p. 20.

Vanderkleed, C. E.: All of the samples of solution of formaldehyde examined exceeded the U. S. P. requirements of 1.075 to 1.081 for specific gravity. The average was between 1.082 and 1.087. Most

of the samples gave reactions for chloride, sulphate and calcium, but were otherwise U. S. P.—J. Am. Pharm. Assoc. 1916, v. 5, p. 538.

Earp, Samuel E.: A discussion of the physiologic and toxic action of formaldehyde, with a report of three cases of poisoning by formalin.—New York M. J. 1916, v. 104, p. 391–392.

LIQUOR HYDRARGYRI NITRATIS, N. F.

Diekman, George C.: The deletion of the solution of mercuric nitrate will hardly attract attention. Why this solution should ever have been honored with a place in the Pharmacopœia is a mystery to most of us.—Pract. Drug. 1916, v. 34, No. 10, p. 25.

LIQUOR HYDROGENII DIOXIDI.

Olea, Gregorio: Notes on the preparation of solutions of hydrogen dioxide for medicinal use.—Farm. Españ. 1916, v. 48, p. 151–152.

Khouri, Joseph: A note on the preparation and conservation of solution of hydrogen dioxide containing iodine.—J. pharm. et chim. 1916, v. 14, p. 356–359.

Walton, James H., and Jones, De Witt O.: Data showing the catalytic decomposition of hydrogen peroxide in certain nonaqueous solutions.—J. Am. Chem. Soc. 1916, v. 38, p. 1956–1961.

Anon.: A description of a bottle for keeping highly concentrated (30 per cent) solutions of hydrogen peroxide.—Ztschr. angew. Chem. 1916, v. 29, p. 208.

Emell, Henrik: From the difference in the results obtained in titrating commercial hydrogen peroxide with phenolphthalein and iodoeosin as indicators, it is concluded that both, a mineral acid and a weak organic acid, are present. The nature of the latter could not be determined.—Ztschr. anal. Chem. 1916, v. 55, p. 452–459.

von Bertlan, J. A.: Experimental data obtained in the evaluation of hydrogen dioxide solution by titration with stannous chloride.—J. Chem. Soc. Lond. 1916, v. 110, p. 393 from Chem.-Ztg. 1916, v. 40, p. 373.

Anon.: Two samples of peroxide of hydrogen examined were rejected.—Rep. Wyoming D. F. & O. Com. 1916, v. 2, No. 7, p. 33.

Anon.: One of two samples of solution of hydrogen dioxide examined was rejected for being below standard.—Rep. Connecticut D. & F. Com. 1916, p. 19.

Roberts, J. G.: One lot of hydrogen peroxide solution examined contained about fifteen times the amount of arsenic permitted by the U. S. P. Other lots had too high an acidity and yielded too much residue upon evaporation.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 113.

Tice, William G.: Of four samples of solution of hydrogen dioxide examined, one was below standard.—Rep. New Jersey Dept. Health, 1916, p. 72.

Todd, A. R.: Of five samples of hydrogen peroxide examined, two were rejected.—Bull. Michigan D. & F. Dept. 1916, No. 244–247, p. 20.

Vanderkleed, C. E.: Twenty-three lots of solution of hydrogen dioxide examined were satisfactory with the exception that two of them gave total solids amounting to 0.0479 and 0.340 gm. per 20 cubic centimeters instead of 0.030 as required by the U. S. P.—J. Am. Pharm. Assoc. 1916, v. 5, p. 539.

LIQUOR HYPOPHYSIS.

Xrayser H.: The term "Liquor Hypophysis" is said to be unfortunate, since it implies a preparation made from the entire pituitary body, whereas only the posterior lobe, or infundibulum, is used.—Chem. & Drug. 1916, v. 88, No. 1913, p. 41.

Puckner, W. A.: "Solution of Hypophysis—Squibb" is a sterilized aqueous solution of the water-soluble active principles of the posterior lobe of the pituitary body of cattle free from chemical preservatives. It is standardized according to the physiological method of G. B. Roth.—J. Am. M. Assoc. 1916, v. 67, p. 745.

Watanabe, Walter K., and Crawford, Albert C.: Pituitary extracts, when prepared by certain methods, yield color reactions which suggest the presence of epinephrine or an epinephrine-like compound.—J. Am. M. Assoc. 1916, v. 66, p. 604; see also Rep. Therap. Res. Com. 1916, v. 5, p. 62–75.

Fühner, Hermann: From experiments it is concluded that the active substances of the pituitary body are not esters of choline.—Biochem. Ztschr. 1916, v. 76, p. 232–247.

Fenger, F.: A second contribution to our knowledge of the composition and properties of the posterior lobe of the pituitary body.—J. Biol. Chem. 1916, v. 25, p. 417–422.

Rowe, L. W.: A review of the methods used in pituitary standardization.—J. Lab. & Clin. Med. 1916, v. 2, p. 120–129.

Pittenger, Paul S.: An illustrated description of an isolated uterus method for standardizing pituitary extracts.—Mulford's Vet. Bull. 1916, v. 7, p. 128–136.

Hoskins, R. G.: From an investigation of the action of commercial pituitary extracts, it is concluded that it is unsafe to rely on these preparations for therapeutic use as stimulants for peristalsis.—J. Am. M. Assoc. 1916, v. 66, p. 733.

Miller, Joseph L.: A study of the relation of the hypophysis to certain clinical manifestations and the therapeutic application of its extracts.—Am. J. M. Sc. 1916, v. 152, p. 549–560.

Pal, J.: A report of investigations dealing with the action of pituitary extract on the systemic and glandular secretions in general.—Deutsch. med. Wchnschr. 1916, v. 42, p. 1030–1033.

Goetsch, Emil: Researches to determine the influence of pituitary feeding upon growth and sexual development.—J. H. Hosp. Bull. 1916, v. 27, p. 29–50.

Shamoff, V. N.: A study of the action of pituitary extracts upon the isolated intestinal loop. There exists in the posterior lobe a substance which has an action similar to that of epinephrine.—Am. J. Physiol. 1916, v. 39, p. 268–278; see also Chem. Abstr. 1916, v. 10, p. 1374.

Hoppe-Seyler, J.: On the relation of the pituitary body to diabetes insipidus and the treatment of the latter with pituitary extracts.—Chem. Abstr. 1916, v. 10, p. 1053; see also Münch. med. Wchnschr. 1915, v. 62, p. 1633–1635.

McNeile, L. G.: A report of a case of rupture of the uterus due to the administration of pituitary extract to a woman with an obliquely contracted pelvis. An abstract.—J. Am. M. Assoc. 1916, v. 67, p. 113.

LIQUOR MAGNESII CITRATIS.

Anon.: A working formula for the preparation of six bottles of magnesium citrate solution is given.—N. A. R. D. J. 1916, v. 22, p. 222.

Anon.: Comments on the formula for the preparation of the solution of magnesium citrate.—N. A. R. D. J. 1916, v. 21, p. 1021–1022.

Blomberg, C.: A description of an improved Ph. Ndl. IV method for the preparation of the solution of magnesium citrate.—Pharm. Weekblad, 1916, v. 53, p. 1382–1386.

Léger, E.: Notes on the changes which take place in the composition of magnesium citrate on keeping.—J. pharm. et chim. 1916, v. 13, p. 209–214; see also Farm. Espan. 1916, v. 48, p. 310–312; Chem. Abstr. 1916, v. 10, p. 2027.

Anon.: Of 35 samples of solution of magnesium citrate examined, 21 were found to be below standard.—Rep. Connecticut D. & F. Com. 1916, p. 19.

LIQUOR PEPSIN ANTISEPTICS, N. F.

Anon.: There are altogether too many official pepsin preparations, and not one of them contains a sufficient amount of pepsin per dose to be an efficient medicinal agent.—N. A. R. D. J. 1916, v. 23, p. 151.

LIQUOR PEPSINI AROMATICUS, N. F.

Anon.: Were it not for the fact that the pepsin content of this preparation is somewhat small, it would be by far the most efficient pepsin preparation in the official materia medica.—N. A. R. D. J. 1916, v. 23, p. 414.

LIQUOR PICIS CARBONIS, N. F.

Anon.: A much better preparation than that prepared by the official process results from digesting the coal tar in a tincture made by macerating the quillaja in alcohol.—N. A. R. D. J. 1916, v. 23, p. 152.

LIQUOR POTASSÆ CHLORINATÆ, N. F.

Comte: A discussion of the volumetric assay of chlorinated lime, Javelle water, and Dakin's solution by the usual iodometric method.—J. pharm. et chim. 1916, v. 1916, v. 14, p. 232.

LIQUOR POTASSII ARSENITIS.

Dallande: The author suggests boiling the aqueous mixture of arsenic trioxide and sodium bicarbonate in an Erlenmeyer flask instead of a dish in order to avoid the loss of arsenic.—Drug. Circ. 1916, v. 60, p. 85.

Stinson, Ray: Of 60 samples of Fowler's solution examined, 11 were below standard and 5 were above.—Proc. North Dakota Pharm. Assoc. 1916, p. 111.

LIQUOR SODÆ CHLORINATÆ.

Elledge, H. G.: The pink color observed in certain hypochlorite bleaching solutions is attributed by the author to the presence of traces of sodium permanganate, the latter being derived from the bleaching powder used.—J. Ind. & Eng. Chem. 1916, v. 8, p. 780–781.

Valery, Lucien: A note on the stability of hypochlorites in very dilute solutions, with special reference to their employment for the sterilization of water.—Compt. rend. Acad. sc. 1916, v. 162, p. 326–327.

Comte: A discussion of the volumetric assay of chlorinated lime, Javelle water, and Dakin's solution by the usual iodometric method.—J. pharm. et chim. 1916, v. 14, p. 232.

Penau, H.: In a discussion of the sterilization of water in the field the author calls attention to the chemical composition of the solution of chlorinated soda prepared by double decomposition and of the relative stability of the solution.—J. pharm. et chim. 1916, v. 13, p. 377–385.

Daufresne, M.: Notes on the technique for preparing hypochlorite solutions intended for surgical use.—J. Am. M. Assoc. 1916, v. 67, p. 1795.

Anon.: Dakin's new antiseptic may be looked upon as simply Labarraque's solution of sodium hypochlorite NaOCl made neutral with boric acid. The solution loses its strength on keeping. An important point in connection with the preparation of the solution which seemingly has been overlooked is that the strength of the

bleaching powder is not determined. As is well known, this product is exceedingly variable.—J. Am. M. Assoc. 1916, v. 67, p. 1108.

Editorial: A résumé of the report of H. D. Dakin and H. G. Carlisle on the preparation and use of electrolytic hypochlorite for hospital ships.—Brit. M. J. 1916, v. 1, p. 455–456.

Carrel, A.: Notes on the preparation and preservation of Carrel-Dakin solution.—J. Am. M. Assoc. 1916, v. 67, p. 1777–1778.

Anon.: A note on the boricated solution of sodium hypochlorite prepared according to the formula of Dakin.—J. pharm. et. chim. 1916, v. 14, p. 263.

Doyen, E.: A study of the action of the official sodium hypochlorite and calcium hypochlorite solutions of the Ph. Fr. on spores in the treatment of infected wounds.—Compt. rend. Soc. biol. 1916, v. 79, p. 335–336.

Milroy, Thomas H.: A study of the action of hypochlorites and allied substances on proteins, and their behavior on injection.—Biochem. J. 1916, v. 10, p. 453–465.

Dakin, H. D.: A study of the behavior of hypochlorites on intravenous injection and of their action on blood serum.—Brit. M. J. 1916, v. 1, p. 852–854; see also Chem. Abstr. 1916, v. 10, p. 2374.

Fraser, John, and Bates, H. J.: A report on the treatment of acute toxæmia secondary to gas gangrene by the intravenous injection of a solution of hypochlorous acid.—Brit. M. J. 1916, v. 1, p. 83–86.

Dalton, Frederick J. A.: An enumeration of the advantages of the use of sodium hypochlorite in the treatment of septic wounds.—Brit. M. J. 1916, v. 1, p. 126–128; see also J. Am. M. Assoc. 1916, v. 66, p. 693; Chem. Abstr. 1916, v. 10, p. 1380.

Córdova, Rául F.: Experimental data showing the therapeutic value of hypochlorous acid.—Brit. N. J. 1916, v. 1, p. 651–652.

Mayer, C.: A discussion of the advantages of the solution of magnesium hypochlorite over that of sodium hypochlorite. An abstract.—J. Am. M. Assoc. 1916, v. 66, p. 98.

Dubard: As a disinfectant for wounds, a 2.5 per cent solution of magnesium hypochlorite is stated to be superior to the solution of sodium hypochlorite or Dakin's fluid.—J. Am. M. Assoc. 1916, v. 67, p. 1118.

LIQUOR SODII BORATIS COMPOSITUS, N. F.

Anon.: A note on the preparation of compound solution of sodium borate.—N. A. R. D. J. 1916, v. 21, p. 15.

LIQUOR ZINCI CHLORIDI.

Anon.: A description of a new method for the preparation of the solution of chloride of zinc.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 598 from Pharm. Ztg. 1916, v. 61, p. 130.

Bateman, E.: Data showing the relation between the specific gravity of zinc chloride solutions and their concentrations.—Chem. Eng. 1916, v. 24, p. 131–132.

LITHII CARBONAS.

Wood, H. C., Jr.: It is evident that science lends no support to the use of lithium in medicine. Any judgment in favor of this element must be based solely on bedside experience.—J. Am. M. Assoc. 1916, v. 66, p. 1069–1070.

Haskins, Howard D.: A study of the uric acid solvent power of urine after the administration of piperazin, lysidin, lithium carbonate, and other alkalies.—Rep. Therap. Res. Com. 1916, v. 5, p. 112–123.

LITHII SALICYLAS, N. F.

Anon.: A reprint of the standards proposed for lithium salicylate by the committee on unofficial standards.—J. Am. Pharm. Assoc. 1916, v. 5, p. 87.

LOBELIA.

Anon.: Information relative to the cultivation and harvesting of lobelia is given.—N. A. R. D. J. 1916, v. 23, p. 505–508.

Vanderkleed, C. E., and E'we, G. E.: In a note on the assay of lobelia preparations, the authors report that quite concordant results with excellent end points can be obtained by using the Volhardt method of titration.—J. Am. Pharm. Assoc. 1916, v. 5, p. 713.

Anon.: The alkaloidal content of one sample of lobelia assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

Browne, G. R.: A report of some animal experiments with lobeline sulphate.—Am. J. Clin. Med. 1916, v. 23, p. 678–679.

LUPULINUM, N. F.

Young: Wallace, J.: A consular report of the lupulin trade of Austro-Hungary.—Com. Rep. 1916, No. 113, p. 587.

Scoville, W. L.: The ash content of five lots of lupulin examined ranged between 2.5 to 14.1 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p 540.

Swift, E. G.: Fourteen samples of lupulin examined yielded from 8.0 to 44.8 per cent of ash. Only 3 of the samples yielded less than 10 per cent, and 3 others between 10 and 15 per cent.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

Vanderkleed, C. E.: The ether-soluble portion of 10 lots of lupulin ranged between 44.2 and 69.2 per cent. The same samples yielded from 7.72 to 28.4 per cent of ash.—J. Am. Pharm. Assoc. 1916, v. 5, p. 540.

MAGMA FERRI HYDROXIDI, N. F.

van der Feen, F.: Experimental data showing the osmotic pressure of colloidal oxyhydrate of iron.—Chem. Weekblad, 1916, v. 13, p. 453–458.

MAGMA MAGNESIÆ.

Anon.: It is not understood why the revisers of the U. S. P. use the term "Magnesiæ" in the Latin title for milk of magnesia when "Magnesii" is used for all other preparations of magnesium.—Drug Topics, 1916, No. 9, p. 7.

McNeery, W. W.: An improved formula for the preparation of magma of magnesia is described in detail.—J. Am. Pharm. Assoc. 1916, v. 5, p. 611.

Anon.: A criticism of the U. S. P. formula for preparing magnesia magma states that the choice of the flavoring agent should not be left to the pharmacist.—N. A. R. D. J. 1916, v. 23, p. 11–12.

Anon.: In a discussion of a number of formulas for the preparation of milk of magnesia, it is stated that for some unknown reason certain lots of magnesium sulphate are more difficult to hydrate than others, and for this reason only the salt of pharmacopœial purity should be used.—N. A. R. D. J. 1916, v. 21, p. 1020–1021.

Tice, William G.: Of three samples of milk of magnesia examined, one was below standard.—Rep. New Jersey Dept. Health, 1916, p. 72.

MAGNESII CARBONAS.

Fischter, F., and Osterwalder, R.: A report of investigations to determine the compostion of the precipitate obtained when an aqueous solution of a magnesium salt is treated with ammonium carbonate under different conditions.—Ztschr. anal. Chem. 1916, v. 55, p. 389–392 through Analyst (The), 1916, v. 41, p. 319–320.

Vanderkleed, C E.: Two of six lots of magnesium carbonate examined were low in MgO ignition, assaying 92.6 and 94.8 per cent, respectively. Five of the six samples contained calcium in excess of the U. S. P. limits.—J. Am. Pharm. Assoc. 1916, v. 5, p. 540.

MAGNESII CHLORIDI.

Bourdet, L.: A description of a method for determining the quality of magnesium chloride. Nitric acid is added and the resulting nitrate is converted into the oxide by calcination. The amount of pure magnesium chloride present is calculated after determining the amount of water-insoluble matter, the weight of the nitrate prior to calcining, and the total chlorine.—J. pharm. et chim. 1916, v. 13, p. 102–104.

MAGNESII CITRAS EFFERVESCENS, N. F.

Léger, E.: Observations on the change taking place in magnesium citrate upon keeping. From experiments it is concluded that the magnesium citrate prepared according to the French Codex changes from magnesium citrate containing seven molecules of water of crystallization to the salt containing 13 molecules of water of crystallization on aging.—J. pharm. et chim. 1916, v. 13, p. 209–214.

Lea, E. J.: The samples of citrate of magnesia examined were not made according to the U. S. P. Tartaric acid had been substituted for citric acid and the proportion of the ingredients was not correct.—Bull. California Bd. Health, 1916, v. 12, p. 112.

MAGNESII OXIDUM.

Scoville, W. L.: Calcined magnesia varies much in lightness. Uniformity in this respect is very desirable for stock preparations, but less important for other purposes.—J. Am. Pharm. Assoc. 1916, v. 5, p. 540.

Vanderkleed, C. E.: None of the samples of calcined magnesium examined during the past year gelatinized with water as required by the U. S. P., and most of them contained an excess of calcium over the U. S. P. limits.—J. Am. Pharm. Assoc. 1916, v. 5, p. 540.

E'we, G. E.: Some of the lots of magnesium oxide examined showed calcium in excess of the U. S. P. limits.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 114.

Patch, E. L.: One of the four samples of calcined magnesia examined yielded only 93.7 per cent of MgO after ignition.—J. Am. Pharm. Assoc. 1916, v. 5, p. 540.

MAGNESII SULPHAS.

Grimbert, L.: The author calls attention to the presence of arsenic in commercial samples of magnesium sulphate. Three samples examined contained 0.47, 0.32, and 0.68 grams of arsenic, respectively, per kilogram.—J. pharm. et chim. 1916, v. 13, p. 197.

Fleury, E.: The author, in commenting on the paper of Grimbert, recommends that the arsenic be determined by the method involving the staining of mercuric chloride or silver nitrate paper and not by the Marsh test.—J. pharm. et chim. 1916, v. 13, p. 385.

E'we, G. E.: One lot labeled "Magnesium Sulphate—not more than 20 per cent water" contained 25.5 per cent of water. Another sample labeled "dried and powdered" contained 10.2 per cent of water.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 114.

Patch, E. L.: Of 15 lots of crystalline magnesium sulphate examined, only 1 was free from chloride. The others contained from a trace to 0.50 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 540.

Street, John Phillips: All of the 37 samples of magnesium sulphate examined showed a high degree of purity.—Rep. Connecticut Agric. Exper. Sta. 1916, part 4, p. 255.

Peck, Charles H., and Meltzer, Samuel J.: The employment of magnesium sulphate (intravenously) as an anesthetic may prove to be of practical value for the reason that it may cause simultaneously a moderate degree of relaxation of the muscular mechanism and because the untoward effects can be rapidly reversed by the careful administration of calcium chloride.—J. Am. M. Assoc. 1916, v. 67, p. 1131–1133.

Leonard, Edward A.: A report on the employment of intraspinal injections of magnesium sulphate in the treatment of delirium tremens.—J. Am. M. Assoc. 1916, v. 67, p. 509–510.

Meltzer, S. J.: An account of researches on the inhibitory properties of magnesium sulphate and their therapeutic application in tetanus.—J. Am. M. Assoc. 1916, v. 66, p. 931–934.

Esmond, J.: A discussion on the use of magnesium sulphate solution in the treatment of burns with a report of one case.—J. Am. M. Assoc. 1916, v. 67, p. 969–970.

MALVAE FOLIA, N. F.

Anon.: A reprint of the standards for mallow leaves proposed by the committee on unofficial standards.—J. Am. Pharm. Assoc. 1916, v. 5, p. 87–88.

MANGANI DIOXIDUM PRAECIPITATUM.

Vanderkleed, C. E.: One lot of manganese dioxide examined yielded some insoluble residue in the test for antimony sulphide and insoluble substances, but was otherwise U. S. P.—J. Am. Pharm. Assoc. 1916, v. 5, p. 540.

MANGANI SULPHAS, N. F.

Anon.: A reprint of the standards for manganese sulphate proposed by the committee on unofficial standards.—J. Am. Pharm. Assoc. 1916, v. 5, p. 88.

Vanderkleed, C. E.: The moisture content of seven lots of manganese sulphate examined ranged between 29.4 and 37.4 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 540–541.

MANNA.

Alsberg, C. L.: The tentative standards laid down by the Bureau of Chemistry require that manna should yield not less than 75 per cent of material (mannite) soluble in 90 per cent alcohol, not more than 10 per cent of moisture, and not more than 3 per cent of ash.—S. R. A.-Chem. 1916, No. 16, p. 30.

Rusby, H. H.: The definition of manna, taken in connection with the description, now permits the importation of "sorts," provided they be of good quality; a very desirable change.—Drug. Circ. 1916, v. 60, p. 537.

Battandier, J. A.: A note on manna obtained from *Olea Europea*. The excretion of manna was caused by the damage inflicted by the larvæ of a species of *Cossus* (goat moth).—J. pharm. et chim. 1916, v. 13, p. 105.

MASSA HYDRARGYRI.

E'we, G. E.: One lot of blue mass, powdered, examined contained 38.5 per cent metallic Hg. The U. S. P. requirement is 35 per cent.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 110.

Vanderkleed, C. E.: Two lots of blue mass powder examined contained 32 and 31.3 per cent, respectively, of metallic mercury; both were below the standard of 33 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 537.

MATRICARIA.

Roberts, J. G.: Six to 10 per cent of stems was found in 10 samples of matricaria (German) examined. The standard adopted for the U. S. P. IX is 5 per cent.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 114.

MEL.

Parry, Ernest J.: There is not a single word under "Honey" in the U. S. P. dealing with its examination by polarimetric methods, whereas, comparatively trivial color reactions are given undue prominence.—Chem. & Drug. 1916, v. 88, No. 1913, p. 40.

Berger, Fr.: A continuation of an article on bee's honey and wax and their use as therapeutic agents.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 450–454.

Lehmann, P., and Stadlinger, H.: The authors call attention to a correction in H. Kretzschmar's publication on the polarimetric determination of sugar in honey by the method of Lehmann-Stadlinger. Kretzschmar is stated to have used the wrong factor in his computations—the algebraic difference between the two polarimetric readings should have been multiplied by 5.7 instead of 7.5.—Ztschr. Unters. Nahr.- p. Genussm. 1916, v. 31, p. 160–162.

Anon.: From experiments, G. Langer concludes that the albumen present in honey is not derived from the pollen of flowers, but from the saliva of the bees. An abstract.—Pharm. J. 1916, v. 96, p. 471.

Atkins, W. R. G.: A method for determining the sugars in honey is described. The aldehydic sugars are estimated by oxidation with bromine and the ketonic fructose by polarimetric methods.—Pharm. J. 1916, v. 97, p. 571.

MENTHA PIPERITA.

van der Wielen: Notes on the cultivation of *Mentha piperita* in Holland. *Mentha piperita* is stated to be a hybrid of *M. aquatica* and *M. viridis*.—Chem. & Drug. 1916, v. 88, p. 911.

MENTHOL.

Anon.: The new edition of the Finnish pharmacopœia specifies that menthol shall melt at 43° to 44° C.—Am. Perf. 1916, v. 11, p. 94.

Likhatcheva, N. P.: The action of camphor and menthol on coronary and peripheral vessels. The author found from her experiments on the ear and heart of rabbits that camphor, borneol, and menthol dilate the coronary peripheral blood vessels in dilutions of 1:2500 and 1:5000. An abstract.—J. Am. M. Assoc. 1916, v. 67, p. 843 from Russkiy Vrach, 1916, v. 15, No. 21.

METHYLIS SALICYLAS.

Scoville, Wilbur L.: The main advantage of the U. S. P. IX specifications for methyl salicylate is that one can now properly label a drug as "Oil of Wintergreen, True," "Oil of Wintergreen, from Sweet Birch," or "Oil of Wintergreen, Synthetic," as the case may be.—Bull. Pharm. 1916, v. 30, p. 364.

Umney, J. C.: The specific gravity for natural wintergreen oils (1.175 to 1.182 at 25° C.) is very properly placed lower than that for the synthetic methyl salicylate (1.80 to 1.185 at 25° C.).—Perf. & Ess. Oil Rec. 1916, v. 7, p. 344.

Leone, Gustavo: A report of experimental researches to determine the toxic action of methyl salicylate. The most striking effects in dogs are found to be an intense hyperemia of the brain and lungs.—Arch. farmacol. sper. 1916, v. 22, p. 327–352.

METHYLTHIONINÆ CHLORIDUM.

Roberts, J. G.: A sample from one lot of methylene blue examined had an abnormal purplish-brown color, contained zinc, and yielded 21.87 per cent residue upon ignition.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 114.

Scoville, W. L.: Many lots of methylene blue examined contained zinc.—J. Am. Pharm. Assoc. 1916, v. 5, p. 541.

Swift, E. G.: One sample of methylene blue examined yielded 49.6 per cent of ash.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

MISTURA CRETÆ.

Anon.: Notes on the preparation of chalk mixture.—N. A. R. D. J. 1916, v. 22, p. 428.

MISTURA GLYCYRRHIZÆ COMPOSITA.

Anon.: Detailed directions for the preparation of the compound mixture of glycyrrhiza are given.—N. A. R. D. J. 1916, v. 21, p. 660.

MISTURA OPII ET RHEI COMPOSITA.

Raubenheimer, Otto: The history of the origin of "Sun Cholera Mixture."—J. Am. Pharm. Assoc. 1916, v. 5, p. 624–625; see also Nat. Druggist, 1916, v. 46, p. 279–280.

Raubenheimer, Otto: A reconstructed formula for sun cholera mixture is presented. The formula contains 50 per cent of paregoric instead of 20 per cent of tincture of opium.—J. Am. Pharm. Assoc. 1916, v. 5, p. 845.

MISTURA PECTORALIS, STOKES, N. F.

Anon.: The official title for this preparation is a most violent affront to proper nomenclature and ethics in spite of the fact that the principles of revision intended to discourage therapeutic and anatomical titles.—N. A. R. D. J. 1916, v. 22, p. 1082.

MORPHINA.

Von Braun, J.: Researches on the chemistry of morphine derivatives.—Chem. Zentralbl. 1916, v. 87, part 2, p. 17–19.

Carlinfanti, E.: Descriptions of colorimetric methods for the determination of minute quantities of morphine and codeine. The red color produced by the addition of concentrated sulphuric acid with a trace of nitric acid is the basis for the estimation of morphine.—Chem. Abstr. 1916, v. 10, p. 1909.

Debourdeaux: Notes on the quantitative determination of morphine in galenical preparations. The author calls attention to the fact that the presence of alcohol, starch, and other substances influence the correctness of the results obtained with the lime method. He also states that temperature errors are the lowest between 15° and 18° C. An abstract.—C. U. C. P. Alumni J. 1916, v. 23, p. 202.

Tunmann, O.: Descriptions of microchemical methods for distinguishing between morphine and codeine.—J. Chem. Soc. Lond. 1916, v. 110, part 2, p. 655–656 from Apoth.-Ztg. 1916, v. 31, p. 148–150.

Doran, James M.: A description of a method for the separation of morphine and heroin in which the latter is removed from the alkaline liquid by means of carbon tetrachloride. Morphine is soluble to a very slight extent only.—J. Am. Pharm. Assoc. 1916, v. 5, p. 163–165; see also Chem. Abstr. 1916, v. 10, p. 1406.

Homberger, A. W., and Munch, J. C.: A report of investigations relating to the quantitative determination of morphine in the various organs when injected into cats and rabbits.—J. Am. Chem. Soc. 1916, v. 38, p. 1873–1876.

Rosenbaum, Nathan: Form experiments, it is concluded that dihydromorphine and diacetyldihydromorphine when used subcutaneously are satisfactory substitutes for morphine as they do not appear to produce addiction. An abstract.—Chem. Zentralbl. 1916, v. 87, Part 2, p. 159.

Editorial: A review of some of the recent articles dealing with the subject of acquired tolerance to morphine.—J. Am. M. Assoc. 1916, v. 66, p. 657.

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Skeel, Arthur J.: Analgesia and anesthesia in obstetric practice. A review of the principal theoretical considerations obtaining to the use of morphine.—J. Am. Assoc. 1916, v. 66, p. 797–799.

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Anon.: Notes on the loss in weight of musk on keeping. C. B. Bazzoni found that musk lost 14 per cent of its weight in seven months. It also lost its odor, which could not be restored by crushing, moistening, or exposure to the air. An abstract.—Sci. Am. 1916, p. 173.

Anon.: Notes on odors, principally of musk, and the attempts made to find a synthetic substitute.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 133–134.

MUCILAGO TRAGACANTHÆ.

Anon.: It is suggested that spirit of chloroform be substituted for the alcohol in the official English formula. The preparation would then keep better.—Chem. & Drug. 1916, v. 88, p. 102.

MYRICA, N. F.

Anon.: A short note giving information relative to the production and collection of bayberry bark in America.—N. A. R. D. J. 1916, v. 21, p. 917.

MYRISTICA.

Anon.: A note on the history of nutmeg and mace.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 76–77.

Frary, Guy G.: All of the samples of nutmeg and mace examined were passed.—Rep. South Dakota F. & D. Com. 1916, No. 16, p. 135–136.

MYRRHA.

Rusby, H. H.: Several lots of myrrh examined contained many dark, soft, and sticky pieces of peculiar, intense, bitter taste. It has been maintained that this is genuine myrrh. If so, the U. S. P. description should be so changed as to include them.—J. Am. Pharm. Assoc. 1916, v. 5, p. 541.

Ewe, G. E.: Only two of seven lots of myrrh examined met the U. S. P. IX requirement of 35 per cent alcohol solubility. The other five lots ran 24.6, 27.0, 30.1, 30.4, and 33.9 per cent, respectively.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 115.

Roberts, J. G.: One sample of myrrh examined proved to be of inferior quality on account of containing only 25 per cent of alcohol-soluble matter and yielding 14.7 per cent of ash.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 115.

NAPHTHALENUM.

Hilpert, S.: Data showing the solubility of naphthalene in pure NH_3 and in aqueous ammonia solutions of different strengths. In 10 per cent solution of ammonia, it is soluble to the extent of 0.042 gram per 1,000 grams. The solubility is influenced by the presence of pyridine. An abstract.—Pharm. J. 1916, v. 96, p. 521.

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NITROGENII MONOXIDUM.

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McCardie, W. J.: A report of a case of death after the use of nitrous oxide-oxygen for the production of local anesthesia.—Brit. M. J. 1916, v. 2, p. 109.

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Crile, George W.: A report of experimental researches to determine the nature of nitrous oxide and of ether anesthesia.—J. Am. M. Assoc. 1916, v. 67, p. 1830–1831.

Cooke, A. B.: The ideal anesthetic for major surgery is the one capable of producing analgesia and unconsciousness without danger of discomfort to the patient. Any agent or method which furthers this ideal—which tends in any way to relieve surgery of its harshness and to smooth down the rough places—should receive our most earnest and open-minded attention. My experience with nitrous oxide as an anesthetic would seem to warrant the conclusion that it is entitled to high rank in this beneficent class.—J. Am. M. Assoc. 1916, v. 67, p. 175–177.

McCormick, A. S.: Nitrous oxide will usually anesthetize a patient more quickly than ether; but once in six to ten times the addition or substitution of the latter is necessary.—J. Am. M. Assoc. 1916, v. 66, No. 1, p. 49

Soule, W. L.: Nitrous oxide versus ether. Following nitrous oxide anesthesia, vomiting takes place in a proportion of cases by no means insignificant even when the anesthesia has been satisfactory and no ether required.—J. Am. M. Assoc. 1916, v. 66, p. 376.

Coburn, Raymond C.: Notes on nitrous oxide administration. Even with the accumulated knowledge gained from several years' experience in the prolonged administration of nitrous oxide (and oxygen), there is still quite a tendency by some to disregard essential elements of safety, especially when nitrous oxide, administered with normal oxygenation, does not furnish a sufficient depth of anesthesia.—J. Am. M. Assoc. 1916, v. 66, p. 799–800.

Heaney, N. S.: A discussion of the employment of nitrous oxide analgesia in obstetrics.—Med. Rec. 1916, v. 89, p. 995–997; see also A. J. Skeel, J. Am. M. Assoc. 1916, v. 66, p. 797–799, and F. C. Irving, Boston M. & S. J. 1916, v. 174, p. 462–464.

NUX VOMICA.

Memminger, Lucien: A consular report describes the collection and exportation of nux vomica in Madras Presidency.—Com. Rep. 1916, No. 217, p. 1012; see also Am. Food J. 1916, v. 11, p. 505.

Kensen, H. R.: Experimental data relative to the determination of strychnine in nux vomica. The process of the Ph. Brit. 1914 gives low results because nitration is directed to be carried out at 50° C. instead of 20° C.—Pharm. J. 1916, v. 97, p. 458–461.

Watt, H. E., and Angus, G. B.: Nux vomica contains 1 to 2 per cent of a solid fat consisting principally of the glycerides of capric, caprylic, caproic, butyric, and palmitic acids. The chemical and physical constants of the fat are also given.—J. Soc. Chem. Ind. 1916, v. 35, p. 201.

E'we, G. E.: Of 16 samples of nux vomica assayed, the strychnine content of 2 was above standard and 14 below.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

Patch, E. L.: Five samples of nux vomica examined assayed 1.175, 1.195, 1.115, 1.155, and 1.23 per cent, respectively, of strychnine.—J. Am. Pharm. Assoc. 1916, v. 5, p. 541.

Vanderkleed, C. E.: The strychnine content of seven lots of nux vomica examined ranged between 0.705 and 1.328 per cent. The average was 1.013 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 541.

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Alpers, K.: An account of the extraction of fatty oils in Germany from the kernels of stone fruits. An abstract.—Pharm. Weekblad, 1916, v. 53, p. 1618.

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Scoville, Wilbur L.: The odor of rancid fats may be removed with a solution of potassium permanganate. Excessive amounts of free acid are best removed by shaking with sodium silicate solution.—Bull. Pharm. 1916, v. 30, p. 78.

Vintilescu, J., and Popescu, Alin: Biochemical reactions of rancid fats. Free oxygen is liberated by the addition of one of the peroxidases. The guaiac test can then be applied.—Apoth.-Ztg. 1916, v. 31, p. 42.

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Bacon, Chas. V.: Tables showing the physical and chemical contents of tea-seed (*camellia theifera*) oil are presented.—Oil, Paint & Drug Rep. 1916, v. 90, No. 21, p. 51.

Fachini, S., and Dorpa, G.: A chemical study of the oil of the fruits of *Parthenocissus quinquefolia*, Planchon.—Ann. chim. applicata. 1916, v. 5, p. 301–304.

OLEUM AMYGDALÆ EXPRESSUM.

Wastenson, H.: Notes on the testing of almond oil, accompanied by analytical data obtained in the examination of a number of samples. Changes in the Ph. Svec. method are recommended.—Svensk farm. Tidsskr. 1916, v. 20, p. 256–261.

Roberts, J. G.: One sample of oil of sweet almond examined was rejected on account of having an iodine number of 106. The U. S. P. standard is not above 100.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 116.

Tice, William G.: Of two samples of oil of sweet almond examined, one was below standard.—Rep. New Jersey Dept. Health, 1916, p. 72.

OIL, CHAULMOOGRA (NONOFFICIAL).

Rakuzin and Flier: From a comparison of the available literature on chaulmoogra oils, it is concluded that *Oleum Chaulmoogræ* and *Oleum Gynocardiæ* are not identical, and that only the optically active chaulmoogra oil and chaulmoogric acid are of medicinal value.—Drug. Circ. 1916, v. 60, p. 750.

Brill, H. C.: In a paper discussing the source of the false varieties of chaulmoogra oil, the author states that *toraktogenos* and *hydnocarpus* oils are physiologically identical, but that the oil from *Gynocardia odorata* may be different.—Philippine J. Sc. 1916, v. 11, sec. A, p. 75–80.

Anon.: The intravenous injection of a sterilized emulsion of chaulmoogra oil is stated to have given encouraging results in the treatment of leprosy.—Chem. & Drug. 1916, v. 88, p. 69.

Anon.: A list of references to articles on the use of chaulmoogra oil in the treatment of leprosy.—J. Am. M. Assoc. 1916, v. 66, p. 1576.

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Rogers, Sir Leonard: A report on the preparation of sodium gynocardate and its use in the treatment of leprosy.—Brit. M. J. 1916, v. 2, p. 550–552.

OLEUM GOSSYPII SEMINIS.

Utz: From experiments, it is concluded that Becchi's reaction is retarded and that Halphen's test is negative when applied to cotton seed oil which has been bleached with benzoyl peroxide. An abstract.—Drug. Circ. 1916, v. 60, p. 211.

Besson, A.: The author reports on the application of the Millian test to the detection of kapok oil in cotton seed oil. An abstract.—C. U. C. P. Alumni J. 1916, v. 23, p. 12.

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Seaton, Max Y., and Sawyer, G. B.: Data showing the molecular weight of linseed oil as determined by the freezing-point, boiling-point, and stearic-acid methods.—J. Ind. & Eng. Chem. 1916, v. 8, p. 490–493.

Salway, Arthur H.: Studies on the oxidation of unsaturated fatty oils and unsaturated fatty acids. Part I. The formation of acrolein by the oxidation of linseed oil and linolenic acid.—J. Chem. Soc. Lond. 1916, v. 109, p. 138–145.

Table showing some of the analytical results reported for linseed oil.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Barnard, H. E.	17	12	Bull. Indiana Bd. Health, 1916, v. 13, p. 15, 52, 76, 112.
Casey, F. W.	11	8	Bull. Michigan D. & F. Dept. 1916, No. 252-255, p. 19.
Congdon, Leon A.	6	1	Rep. Kansas Bd. Health, 1916, p. 133.
Howard, Charles D.	2	1	Bull. New Hampshire Bd. Health, 1916 v. 4, Nos. 7-8, p. 129.
McGill, A.	210	20	Bull. Lab. Inl. Rev. Dept., Canada, 1916, No. 332, p. 5.
Sayre, L. E.	2	1	Bull. Kansas Bd. Health, 1916, p. 13.

OLEUM MORRHUÆ.

Chapman, A. C.: A report on the presence of a new hydrocarbon ($C_{28}H_{52}$) in a sample of cod liver oil examined. The author calls it spinacidene, as it has been obtained from the livers of certain members of the subfamily *Spinacidæ*.—Chem. & Drug. 1916, v. 88, p. 1242.

Neno, Seuchi: Kombara earth (an acid soil) is stated to be a good reagent for the identification of cod liver oil. A bluish-green color is produced when a small amount of the oil is shaken with about 1 gram of the earth.—Boll. chim.-farm. 1916, v. 55, p. 11.

Mastbaum, H.: A shipment of fish oils received in London was condemned for being adulterated with mineral oil. Upon examination the oil proved to be that obtained from the livers of certain Mediterranean fish. These oils are stated to contain 80 to 90 per cent of unsaponifiable hydrocarbons having the properties of mineral oil.—Pharm. J. 1916, v. 96, p. 327.

Swift, E. G.: It is difficult to secure cod liver oil of satisfactory quality. Most of the supplies are dark in color and unpleasant in taste.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

Roberts, J. G.: Three lots of cod liver oil examined gave saponification numbers above the U. S. P. maximum of 185. As they were within the limits of 180 to 190 adopted for the U. S. P. IX, they were considered to be of desirable quality.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 115.

OLEUM OLIVÆ.

Parry, Ernest J.: In normal times, the most common adulterant of olive oil is arachis oil. The U. S. P. gives color reactions for cotton seed oil and sesame oil, but the perfectly reliable method of

detecting and approximately estimating arachis oil is not even referred to. This is incredible in a pharmacopœia published in 1916.—Chem. & Drug. 1916, v. 88, No. 1913, p. 40.

Parry, Ernest J.: The validity of prescribing Becchi's test for cotton seed oil in the case of lard and Halphen's test in the case of olive oil is questioned.—Chem. & Drug. 1916, v. 88, No. 1913, p. 40.

Biazzo, R., and Vigdorcik, Sc.: A review of methods for the detection of peanut oil in olive oil, with a description of a new method.—Ann. chim. applicata. 1916, v. 6, p. 179–185.

Biazzo, R., and Vigdorcik, S.: A description of a method for the detection of rapeseed oil in olive oil.—Ann. chim. applicata. 1916, v. 6, p. 185–195.

Lea, E. J.: Many druggists in this State are still dispensing cotton seed oil for sweet oil.—Bull. California Bd. Health, 1916, v. 12, p. 50.

Lea, E. J.: Samples of olive oil examined contained rancid oil and had the odor of decayed vegetable material.—Bull. California Bd. Health, 1917, v. 12, p. 230.

Roberts, J. G.: One sample of olive oil was rejected on account of having an acid number of 4.21, which is too high for an edible oil.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 116.

Anon.: Of 58 samples of olive oil analyzed, 10 were rejected.—Rep. Utah D. & F. Com. 1916, p. 96.

Lythgoe, Hermann C.: Of 30 samples of olive oil examined, three were adulterated.—Rep. Massachusetts Bd. Health, 1916, p. 450.

Todd, A. R.: One sample of olive oil examined was rejected.—Bull. Michigan D. & F. Dept. 1916, No. 250–251, p. 16.

OLEUM RICINI.

Lemberger, Joseph L.: A short article on the possibility of cultivating the castor oil plant on a scale sufficiently large for commercial purposes.—J. Am. Pharm. Assoc. 1916, v. 5, p. 737–739.

Memminger, Lucien: A consular report on the castor oil industry of India.—Com. Rep. 1916, No. 228, p. 1187–1188.

Anon.: A description of a method for rendering resinified castor oil fluid.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 598 from Pharm. Ztg. 1916, v. 61, p. 356.

Anon.: Notes on the early history of the use of castor oil in therapeutics.—Chem. & Drug. 1916, v. 88, No. 1877, p. 47.

Lea, E. J.: A sample of castor oil examined was adulterated with peanut oil and sperm oil.—Bull. Califorina Bd. Health, 1916, v. 11, p. 536.

Frary, Guy G.: A sample labeled "Eldorado castor oil" was misbranded as it contained no castor oil but consisted largely of mineral

oil admixed with 7 per cent of fatty oils.—Rep. South Dakota F. & D. Com. 1916, No. 16, p. 151.

OLEUM SESAMI.

Senft, Eman.: Notes on the cultivation of *Sesamum indicum* D. C.—Pharm. Post, 1916, v. 41, p. 87–89.

OLEUM TIGLII.

Comte: Descriptions of a colorimetric and a physiologic method for identifying small quantities of croton oil.—J. pharm. et chim. 1916, v. 14, p. 38–39.

Boehm, R.: A neutral substance which on further purification yielded croton resin was separated from crotonolic acid. This resin was found to be extremely poisonous to frogs. An abstract.—Pharm. Ztg. 1916, v. 61, p. 116.

OLEA VOLATILA.

Anon.: A summary of the general results of the 1914 census of manufactures for the essential oil industry issued by Director Samuel L. Rogers of the Bureau of Census, Department of Commerce.—Northwestern Druggist (The), 1916, v. 17, No. 8, p. 31.

Adrian, J. L.: An illustrated description of an up-to-date oil distillery in Spain.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 44–45.

Editorial: Remarks on the application of science to the cultivation of perfume plants.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 31–32.

Parry, E. J.: Criticisms of the U. S. P. IX monographs on essential oils. Special objection is made to the frequent omission of figures for refractive index and rotatory power.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 296–302.

Editorial: An English criticism of the new edition of the U. S. P. calls attention to the fact that only in a few cases are tests prescribed for the neutrality or slight acidity of alcoholic solutions of the volatile oils. The reason for this lack of uniformity in tests is not understood.—Chem. & Drug. 1916, v. 88, No. 1921, p. 45.

Anon.: A synopsis of Schimmel & Co.'s criticism of the essential oil monographs of the British Pharmacopœia.—Chem. & Drug. 1916, v. 88, No. 1877, p. 52.

Anon.: No solubility data are given in the Ph. Brit. for the oils of cajuput, Siberian fir, ajowan, copaiba, cubeb, lemon-grass, rose, mustard, and rectified turpentine. The omission is condemned on pharmaceutical grounds.—Chem. & Drug. 1916, v. 88, p. 793.

Anon.: A review of the third volume of the second edition of Gildemeister's *Essential Oils* states that there is little new work in

the book, which is, in fact, a compilation of the work that has appeared since the first edition.—Chem. & Drug. 1916, v. 88, No. 1925, p. 37.

Anon.: A dictionary of essential oils, with bibliographic references and index to common names.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 152–206.

Reclaire, A.: A review of the advances made in the chemistry of the terpenes and the essential oils for the years 1914 and 1915.—Chem. Ztg. 1916, v. 40, p. 977–978, 987–989, 1000–1001, 1019–1022.

Editorial: Observations on the trend of essential oil research.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 3–4.

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Dupont, Justin: A classification of synthetic products used in the manufacture of synthetic perfumes.—Scientific American, 1916, No. 2103.

Prins, H. J., and Schwarz, S.: An enumeration of the different esters present in essential oils and a discussion of their use in the manufacture of perfumery.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 334–335.

Swift, E. G.: Artificial substitutes for the natural volatile oils are increasing. Oils of coriander, rose, neroli, and cinnamon (Ceylon) are mostly of the artificial variety. It is needless to say that they are not as satisfactory as the natural oils, but the latter are not always obtainable.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

Cusmano, Guido: A discussion of the processes of oxidation and reduction in the terpene group.—Gaz. Chim. Ital. 1916, v. 46, p. 281–289.

Bonis, A.: A report of investigations bearing on the quantitative determination of volatile oils in liquers.—Ann. Falsif. 1916, v. 9, p. 12–14; see also L. Bonnet, p. 14–16; C. F. Muttelet, p. 17–22, 70–73; and X. Rocques, p. 127–143.

Woodman, A. G., et al.: A description of a nephelometric method for the determination of small amounts of essential oils.—J. Ind. & Eng. Chem. 1916, v. 8, p. 128–131.

Anon.: A criticism of a recent publication by T. H. Durrans on the analysis of essential oils.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 219–220.

Anon.: A note on the use of vanillin hydrochloride as a reagent for the identification of volatile oils. An abstract.—Ann. Falsif. 1916, v. 9, p. 480.

Anon.: A discussion of "optics" as applied to the analysis of volatile oils.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 65–67.

Marcille, R.: A report of researches relative to the determination of the iodine index of volatile oils, with special reference to the influence of luminosity.—Ann. Falsif. 1916, v. 9, p. 6–11.

Anon.: In the acetylation process for the estimation of alcohols in essential oils, the acetic anhydride employed should have a specific gravity of at least 1.080 and should contain not less than 95 per cent of acetic anhydride. It is also necessary to be certain of the absence of moisture in the anhydrous sodium acetate used.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 374.

Simmons, W. H.: A discussion of the use of formic acid for determining relative amounts of perfume alcohols in volatile oils. The author concludes that formic acid is a valuable reagent for use in the examination of the oils of geranium, rosemary, and peppermint.—Analyst, 1916, v. 40, p. 491–494.

Slack, H. F.: A description of a new method for determining acid and ester values. Commercial benzyl alcohol is employed as the solvent for the oil.—Chem. & Drug. 1916, v. 87, p. 673.

Anon.: Remarks on the value of fractional distillation in the detection of adulterations in essential oils.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 250–252.

Anon.: Remarks by Christian Beilstein on the sophistication of essential oils.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 371.

Anon.: American peppermint and sandalwood oils are cited as examples to show that essential oils may be adulterated in such a way that it is impossible to detect sophistication without fractional distillation and the examination of each fraction.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 249.

E'we, G.: Notes on the market quality of some volatile oils used in veterinary practice namely, the oils of cajeput, chenopodium, juniper, origanum, peppermint, sassafras, and turpentine.—Mulford's Vet. Bull. 1916, v. 7, p. 139–141.

Scoville, W. L.: The difficulties experienced at present in the importation of volatile oils has led to some attempts at adulteration. The mixing of natural and synthetic products seems to have increased, and it is difficult to obtain some oils of satisfactory quality. Oil of rose geranium, oil of eucalyptus, and oil of neroli are examples of this class.—J. Am. Pharm. Assoc. 1916, v. 5, p. 541.

Anon.: A note on the sweetening value of volatile oils, including oils of cinnamon, phenyl, and anise.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 62.

Editorial: Notes on the use of volatile oils for the destruction of vermin.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 4–5.

Muirhead, A. L. and Geraldn, H. F.: A study of the action of certain volatile oils on irrigated intestinal segments. The oils used

were pennyroyal, tansy, wormwood, turpentine, rue, anise, and savine.—J. Pharmacol. & Exper. Therap. 1916, v. 8, p. 253–260.

Anon.: Descriptions of the physical and chemical properties of a number of little known essential oils.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 339–340.

Uchida, S.: Descriptions of the characteristics and constituents of a number of Japanese essential oils are given.—Chem. & Drug. 1916, v. 88, p. 476.

Umney, J. C.: A presentation of data showing the difference between Bourbon and Algerian geranium oils.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 91.

Baker, R. T., and Smith, H. G.: Analytical notes on the oil of the leaves of *Darwinia glandiflora*.—J. Proc. Roy. Soc. New South Wales, Sydney, 1916, v. 50, p. 181–186.

Schorger, A. W.: Experimental data relating to the physical and chemical constants of the leaf and twig, and bark oils of incense cedar.—J. Ind. & Eng. Chem. 1916, v. 8, p. 22–24.

Anon.: A brief note on the habitat and uses of Indian lemon-grass oil.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 333.

Umney, J. C.: Data showing the decrease in citral content of Bourbon and Cochin lemon-grass oils on storing.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 94.

Jacobson, C. A.: Notes on essential oils from some Nevada desert plants.—Rep. Nevada Agric. Exper. Sta. 1916, p. 44–45.

Yoshida, Naozo: Kimura has shown that the volatile oil obtained from the wood of *Cryptomeria japonica* consists of two sesquiterpenes, cadinene and suginene, and a sesquiterpene alcohol, cryptomeriol. The latter has distinct antiseptic properties.—J. Pharm. Soc. Japan, 1916, July, p. 571.

Tsakalotos and Papaconstantinu: Pinene hydrochloride, pinene hydrobromide and camphene prepared from pinene obtained from the Grecian oil of turpentine showed an optical rotation of +33.19°, +31.31°, and +84.05°, respectively.—J. pharm. et chim. 1916, v. 14, p. 97.

Trier, G.: Some remarks on azulene, the blue hydrocarbon contained in certain volatile oils.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 70–71.

Semmler and Liao: A description of the properties of elemol, a new sesquiterpene obtained from Manila elemi.—Chem. & Drug. 1916, v. 88, p. 876.

Puxeddu, E., and Scaffidi, L.: A study of the polymers of anethole and isosafrole.—Gaz. Chim. Ital. 1916, v. 46, p. 169–176.

Francisconi and Servagiotto: The characteristics and properties of a nitrosochloride prepared from the oil of *Bupleurum fruticosum* are described.—Chem. & Drug. 1916, v. 88, p. 737.

Brooks, Benjamin T.: The author has isolated a sesquiterpene alcohol, $C_{15}H_{26}O$, from the volatile oil of ginger. He has given the alcohol the name of "zingiberol."—J. Am. Chem. Soc. 1916, v. 38, p. 430–432.

Hood, C. S.: The oil obtained from *Monarda punctata* gathered in Florida yielded 52 to 62 per cent of phenols, most of which was thymol.—Bull. U. S. Dept. Agric. 1916, No. 372, p. 1–12.

Hargreaves, G. W.: A report of an investigation of the oil of the bark and leaves of *Cinnamomum Oliveri*, commonly known as Brisbane sassafras. An abstract.—Chem. & Drug. 1916, v. 88, p. 973.

Roberts, O. D.: A report of a chemical examination of the oil of *Cedrus odorata*.—J. Chem. Soc. Lond. 1916, v. 109, p. 791–796.

Kafuku, K.: A presentation of experimental data relative to the composition and properties of a volatile oil obtained from *Liquidambar Formosana*.—Chem. Abstr. 1916, v. 10, p. 2386.

Asahina and Kashiwaki: In an examination of the essential oil distilled from the fruits of *Evodia rutaccarpia*, the authors isolated an aliphatic terpene which they have named "evodene." An abstract.—Chem. & Drug. 1916, v. 88, p. 53.

Russell, G. A.: A report of the distillation and chemical examination of a volatile oil obtained from *Euthamia Caroliniana*, a plant growing on the moist sandy soil of the eastern coast of the United States, especially in Florida.—J. Am. Chem. Soc. 1916, v. 38, p. 1398–1400.

Pearson, R. S.: The two varieties of *Cymbopogon* known by the Hindus as "motia" and "sofia" are to be cultivated at Dehra Dun, India, for the purpose of determining their botanical relationship.—Pharm. J. 1916, v. 97, v. 251.

Kafuku, K.: Notes on the composition and properties of the Formosa variety of citronella oil.—Chem. Abstr. 1916, v. 10, p. 1908.

Scalione, C. C.: Experimental data relating to the composition and properties of a volatile oil obtained from *Calycanthus occidentalis*, a plant growing in northern California and southern Oregon, are presented.—J. Ind. & Eng. Chem. 1916, v. 8, p. 729–730.

OLEUM AMYGDALÆ AMARÆ.

Anon.: Notes on the production and evaluation of oil of bitter almond.—Perf. & Ess. Oil Rec. 1916, v. 7 p. 276–278.

Anon.: In the U. S. P. benzaldehyde assay, the end point with methyl orange is not sharp, and the method can not be considered a satisfactory one. The low minimum of benzaldehyde required (85 per cent) is practically an admission that low results are obtained by this procedure. The most satisfactory method for the deter-

mination of benzaldehyde is by absorption with a saturated solution of sodium bisulphite, when no uncombined portion should remain.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 344.

OLEUM ANISI.

Editorial: A review of the developments in the purification and commerce of anise oil.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 59–60.

Anderson, George E.: Importations of oil of anise from Hongkong increased during the year 1915 as a result of the low price caused by the decreased demand for the oil in Europe.—Com. Rep. 1916, No. 88, p. 180.

Anon.: In the new edition of the Finnish pharmacopœia, the monograph for anise oil reads as follows: Specific gravity at 20° C., 0.980 to 0.990; it congeals at 17° C. and is soluble in three times its volume of 90 per cent alcohol.—Am. Perf. 1916, v. 11, p. 94.

Anon.: The congealing point test for anise oil as given in the U. S. P. IX is not a good one, as the congealation is very frequently unsatisfactory unless it starts at more than 3° below the finally determined temperature.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 300.

Clampett, G. W.: Of seven samples of oil of anise examined, the anethol content ranged from 60 to 85 per cent.—Proc. Texas Pharm. Assoc. 1916, p. 80.

Vanderkleed, C. E.: Two lots of anise oil examined were found to be optically inactive, but answered all other U. S. P. requirements.—J. Am. Pharm. Assoc. 1916, v. 5, p. 541.

OLEUM AURANTII.

Hood, Samuel C.: A report of investigations relative to the possibility of the commercial production of orange oil from waste oranges.—Bull. U. S. Dept. Agric. 1916, No. 399, p. 1–19.

Anon.: Notes on the various commercial varieties of oil of orange.—N. A. R. D. J. 1916, v. 22, p. 889.

Hood, S. C.: Data showing the relative oil yield of Florida oranges.—J. Ind. & Eng. Chem. 1916, v. 8, p. 709–711.

OLEUM BERGAMOTTÆ, N. F.

Lea, E. J.: A sample of oil of bergamot examined was highly adulterated with other oil.—Bull. California Bd. Health, 1916, v. 12, p. 112.

OLEUM BETULÆ EMPYREUMATICUM RECTIFICATUM, N. F.

Anon.: Notes on the preparation, composition, and properties of birch-tar oil.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 308–309.

OLEUM CADINUM.

Huerre: By distillation with steam, *Juniperus oxycedrus* yields 1.6 to 3.1 per cent of a volatile oil. This oil is stated to be free from the disagreeable odor of the oil obtained by destructive distillation and to be equally as effective as the latter in dermatosis. The physical constants of the oil are given. An abstract.—Drug. Circ. 1916, v. 60, p. 20.

OLEUM CAJUPUTI.

Anon.: The fact that the U. S. P. IX does not include an assay for eucalyptol in this oil is stated to be a mistake.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 300.

OLEUM CARYOPHYLLI.

Anon.: In the new edition of the Finnish pharmacopœia, the monograph for oil of cloves reads as follows: Specific gravity at 15° C., 1.044 to 1.070; it is soluble in twice its volume of 70 per cent alcohol.—Am. Perf. 1916, v. 11, p. 94.

Clampett, G. W.: In five samples of oil of cloves examined, the eugonol content ranged from 60 to 83 per cent.—Proc. Texas Pharm. Assoc. 1916, p. 80.

E'we, G. E.: One lot of oil of cloves examined was brown in color.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 115.

OLEUM CASSIÆ.

Anderson, George E.: Shipments of cassia oil from Hongkong to the United States dropped off during 1915 owing to a rise in price and to the fact that American manufacturers object to the presence of so much rosin in the Chinese product.—Com. Rep. 1916, No. 88, p. 180.

Anon: In the new edition of the Finnish pharmacopœia, the monograph for oil of cinnamon reads as follows: Specific gravity 15° C., 1.023 to 1.040; it is soluble in three times its volume of 70 per cent alcohol.—Am. Perf. 1916, v. 11, p. 94.

Anon.: The specific gravity limit, 1.045 to 1.063, is wider than necessary for 80 per cent oils.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 300.

Anon.: A note on a method for the removal of lead from cassia oil.—Ztschr. angew. Chem. 1916, v. 29, p 518.

Lilly, J. K.: Oil of cassia is sometimes substituted for oil of Ceylon cinnamon.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

Clampett, G. W.: Of five samples of oil of cinnamon examined, the cinnamic aldehyde content ranged from 60 to 82 per cent. In four other samples the aldehyde content was between 73 and 90 per cent.—Proc. Texas Pharm. Assoc. 1916, p. 80.

OLEUM CHENOPODII.

Anon.: The U. S. P. limits for the oil of wormseed might have been a little more restricted. A specific gravity of 0.955 is too low for most good oils, and many are soluble in three volumes of 70 per cent alcohol, while some are not soluble in eight volumes.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 300.

Anon.: Paolini and Lomonaco report that Italian wormseed oil contains alpha and beta thujone, thujyl alcohol, phellandrene, and cadinene. The thujyl alcohol is present in the free state, and also in the form of acetic, isovalerianic, and palmitic esters.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 50.

Stheman: A report on the adulteration of oil of chenopodium with oil of eucalyptus and oil of anise.—Drug Circ. 1916, v. 60, p. 273.

Vanderkleed, C. E. One lot of oil of wormseed examined was found to be adulterated with 44 per cent of a fixed oil. Oil of wormseed ordinarily averages 1.5 per cent of nonvolatile residue.—J. Am. Pharm. Assoc. 1916, v. 5, p. 542.

Salant, William, and Livingston, A. E.: A report of experiments with oil of chenopodium and cardiac stimulants on the isolated frog heart.—Am. J. Physiol. 1916, v. 41, p. 21–38.

Salant, William, and Bengis, Robert: A study of the renal changes produced by oil of chenopodium and fatty oils, and of the protective action of diet on the kidney.—J. Pharmacol. & Exper. Therap. 1916, v. 9, p. 529–554.

Coutant, A. F.: A report on the history of a case of poisoning by chenopodium oil employed in the treatment of hookworm. The author also cites 12 other cases of poisoning reported in the literature.—J. Am. M. Assoc. 1916, v. 67, p. 1593–1596.

OLEUM CUBEBÆ.

Anon.: There does not seem to be any adequate reason for omitting the refractive index in prescribing constants for the oil of cubeb, and fractional distillation figures ought to be included.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 300.

Roberts, J. G.: Two oils distilled from mixtures of cubeb stems and berries had optical rotations of −16° 47′ and −17° 13′.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 115.

OLEUM EUCALYPTI.

Anon.: Notes on the cultivation of eucalyptus in India.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 391–392.

Smith, Henry G.: Notes on some of the physical and chemical constants of the essential oil from the bark of *Eucalyptus macar-*

thuri.—J. Proc. Roy. Soc. New South Wales, Sydney, 1916, v. 50, p. 177–180; see also Perf. & Ess. Oil Rec. 1916, v. 7, p. 46.

Lilly, J. K.: An oil of a different type from that of *Eucalyptus globulus* has been substituted for the U. S. P. product.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

Anon.: If 70 per cent oils are the minimum, it is quite unnecessary to have so low a specific gravity as 0.905 at 25° C., as the two values are practically incompatible.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 300.

E'we, G. E.: Only two of eight lots of oil of eucalyptus examined met the U. S. P. IX requirement of 70 per cent cineol. All of the others met the U. S. P. VIII requirement of 50 per cent.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 115.

Roberts, J. G.: The cineol content of one lot of oil of eucalyptus examined was 6 per cent below the U. S. P. standard of not less than 50 per cent. Two other shipments were satisfactory in every respect.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 116.

Editorial: Comments on the Milne method of treating scarlet fever and measles. The spreading of the infection is prevented by rubbing the entire body with eucalyptus oil.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 3.

OLEUM GAULTHERIÆ.

Anon.: A short note giving information relative to the cultivation of wintergreen in America.—N. A. R. D. J. 1916, v. 21, p. 805.

OLEUM LAVENDULÆ.

Vivaudou, V.: An account of the cultivation of lavender in England and France and of the preparation of the oil therefrom—Pharm. Era, 1916, v. 49, p. 223–226.

Anon.: Short descriptions of the four commercial kinds of oil of lavender on the market.—N. A. R. D. J. 1916, v. 21, p. 918.

Anon.: Schimmel & Co. report that from their experiments they are unable to confirm the statement of Elze to the effect that thymol is a normal constituent of oil of lavender.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 50.

Umney, J. C.: From an examination of 250 samples of spike lavender oil, the author concludes that genuine oils yield from 30 to 35 per cent of alcohols and that an oil containing less than 30 per cent is adulterated.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 239–241.

Anon.: A note calls attention to the use of lavender oil in the treatment of infected wounds.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 105.

OLEUM LIMONIS.

Anon.: Brief notes on the production and properties of lemon oil.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 283–284.

Anon.: In the new edition of the Finnish pharmacopœia, the monograph for oil of lemon reads as follows: Specific gravity, 0.855 to 0.861; it is soluble in 12 times its volume of 90 per cent alcohol.—Am. Perf. 1916, v. 11, p. 94.

Anon.: The unjustifiable figures 0.851–0.855 at 25° C. are now official for specific gravity, while the optical rotation has been altered to +57° to +64°, which is at least more reasonable. These figures, however, as those of the British pharmacopœia, can not possibly be justified by experience, and in some seasons the fruits of this parochial narrowmindedness will be found in wholesale rejections of the very finest samples of pure lemon oil.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 300.

Anon.: In commenting on the natural variation of lemon oil, it is stated that the optical rotation limits of +58° to +64° exclude the richest oils, and in 1914–1915 would have barred the crop from the Messina district.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 382.

Bennett, A. H.: Descriptions of some of the characteristics of, and tests for lemon oil.—Chem. Abstr. 1916, v. 10, p. 1400 from Boll. della Camera Agrumaria, 1915, v. 1, part 5, p. 23–24.

Lauffs: A sample of lemon oil examined was found to be adulterated with 50 per cent of paraffin and considerable quantities of oil of turpentine. An abstract.—C. U. C. P. Alumni J. 1916, v. 23, p. 87.

Swift, E. G.: Both the natural and concentrated oil of lemon are frequently low in citral content.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

Clampett, G. W.: Of three samples of oil of lemon examined, the citral content ranged from 1.5 to 3.07 per cent.—Proc. Texas Pharm. Assoc. 1916, p. 80.

E'we, G. E.: All oil of lemon assayed by the Umney method was satisfactory in citral content. One lot labeled "Oil of lemon, extra strong," assayed 12.55 per cent citral by the Umney method.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 116.

Vanderkleed, C. E.: Six lots of lemon oil assayed by the method of J. C. Umney showed a citral content ranging between 3.52 and 4.32 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 541.

OLEUM MENTHÆ PIPERITÆ.

Rabak, Frank: The effect of cultural and climatic conditions on the yield and quality of peppermint oil.—Bull. U. S. Dept. Agric. 1916, No. 454, p. 1–16.

Anon.: In the new edition of the Finnish pharmacopœia, the specific gravity for oil of peppermint at 15° C. is given as 0.900 to 0.910.—Am. Perf. 1916, v. 11, p. 94.

Anon.: No "unofficial" analyst would use the detailed processes given for menthol determination. The acetylated oil is usually not

washed with sodium carbonate solution until alkaline to phenolphthalein nor is 50 cubic centimeters of $\frac{N}{2}$ potassium hydroxide V. S. used for the saponification.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 301.

OLEUM MENTHÆ VIRIDIS.

Holmes, E. M.: The plant yielding this oil is referred to as *Mentha spicata* Linné (*Mentha viridis* Linné). In this case the application of the law of priority fails, since it is evident that Linnæus himself recognized that *Mentha viridis*, which is the source of the garden mint known as spearmint, is a distinct species, and he subsequently separated it from *Mentha spicata*.—Pharm. J. 1916, v. 97, p. 485.

OLEUM MYRCIÆ, N. F.

Anon.: Notes on commercial samples of oil of nutmeg and mace.—N. A. R. D. J. 1916, v' 21, p. 918.

Zibriskie, Luther K.: A consular report on the bay oil industry of the Danish West Indies.—Com. Rep. 1916, No. 161, p. 115.

Anon.: A table showing the relation of specific gravity to the phenol content of oil of bay.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 295.

OLEUM MYRISTICÆ.

Anon.: Notes on commercial samples of oil of nutmeg and mace.—N. A. R. D. J. 1916, v. 21, p. 918.

OLEUM PIMENTÆ.

Clampett, G. W.: The eugonol content of one sample of oil of pimenta examined was 80 per cent.—Proc. Texas Pharm. Assoc. 1916, p. 80.

OLEUM PINI PUMILIONIS.

Holmes, E. M.: The name of the plant yielding this oil is given as *Pinus montana* Miller. As there are three other species of *Pinus* to which the name of *P. montana* has been applied, and as the name *Pumilio* has been retained for the oil, it appears to be stretching a point to apply the law of priority so strictly.—Pharm. J. 1916, v. 97, p. 485.

Record, Samuel J.: An account of the pine needle oil industry of Sweden.—Scientific American, 1916, v. 114, p. 100-101.

OLEUM ROSÆ.

Martell, P.: An account of the cultivation, collection and distillation of Damascus and white roses in Bulgaria.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 405-408, 420-423.

Anon.: In the new edition of the Finnish pharmacopœia, the monograph for oil of rose reads as follows: Specific gravity at 30° C., 0.850 to 0.863; it solidifies at 18° C.—Am. Perf. 1916, v. 11, p. 94.

Anon.: Tables showing the physical and chemical constants of the otto of rose from various sources.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 11-13.

Lilly, J. K.: Some of the oil of rose examined was found to be adulterated with oil of geranium.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

OLEUM ROSMARINI.

Anon.: Notes on the cultivation of rosemary in Tunis.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 214-215.

OLEUM SABINÆ.

Anon.: A note on the physical and chemical constants of Spanish savin oil, probably derived from *Juniperus phoenicea*.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 67.

Lilly, J. K.: Several lots of oil of savin were found to be adulterated with oil of turpentine.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

OLEUM SANTALI.

Anon.: A consular report on the distillation of sandalwood oil in India.—Com. Rep. 1916, No. 103, p. 422.

Briggs, C. H.: Notes on the yield of oil obtained from sandalwood and on the changes taking place in the oil during distillation.—J. Ind. & Eng. Chem. 1916, v. 8, p. 428–429; see also Chem. Abstr. 1916, v. 10, p. 1577.

Anon.: Notes on sandalwood and its oil, including a description of the properties and the constituents of the latter—Perf. & Ess. Oil Rec. 1916, v. 7, p. 68–70.

Anon.: In the new edition of the Finnish pharmacopœia, the monograph for oil of santal reads as follows: Specific gravity at 15° C., 0.973 to 0.985; it dissolves in six times its volume of 70 per cent alcohol.—Am. Perf. 1916, v. 11, p. 94.

Anon.: It is a pity that an ester limit is not given for oil of sandalwood, as adulteration with castor oil in small quantity is easily detected by an ester determination.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 301.

Clampett, G. W.: Of seven samples of oil of sandalwood examined, the santalol content ranged from 60 to 90 per cent.—Proc. Texas Pharm. Assoc. 1916, p. 80.

Lea, E. J.: A sample of sandalwood oil examined was almost entirely a substitute product.—Bull. California Bd. Health, 1916, v. 12, p. 112.

OLEUM SASSAFRAS.

Holmes, E. M.: The well-known name *Sassafras officinale* has been changed to *Sasafras variifolium* (Salisbury) Otto Kuntze, in deference to the law of priority, but the plant was described by Salisbury as a *Laurus* and nothing is therefore gained by the change.—Pharm. J. 1916, v. 97, p. 485.

OLEUM SINAPIS VOLATILE.

Tsakalotos, D. E.: A presentation of data showing the yield, composition, and physical constants of the volatile oil obtained from the black mustard seed grown in Greece.—J. pharm. et chim. 1916, v. 13, p. 78–80.

Anon.: In the new edition of the Finnish pharmacopœia, the specific gravity for oil of mustard is given as 1.022 to 1. 025 at 15° C.—Am. Perf. 1916, v. 11, p. 94.

OLEUM TEREBINTHINÆ.

Anon.: A discussion of the prospects for an indigenous oil of turpentine industry in Germany.—Südd. Apoth.-Ztg. 1916, v. 56, p. 35.

Anon.: Notes on the physical properties of turpentine oil distilled in India from *Pinus longifolia*.—Chem. & Drug. 1916, v. 88, p. 782.

Palazzo, F. C.: A report of chemical investigations bearing on the oil of turpentine from *Pinus pinea* L.—Ann. chim. applicata, 1916, v. 6, p. 135–153.

Posse: A report of a chemical examination of an oil obtained by heating the woody roots of Norwegian pine and fir with sulphite liquor at a pressure of 6 to 8 atmospheres. An abstract.—Pract. Drug. 1916, v. 34, No. 8, p. 39.

Anon.: A discussion of the qualities and properties of oil of turpentine, wood and gum oils—Perf. & Ess. Oil Rec. 1916, v. 7, p. 109–111.

Böttler, M.: A formula for a mixture of oils and resins proposed as a substitute for oil of turpentine as a result of the shortage of the latter in Germany.—Chem. & Drug. 1916, v. 88, Supp. 34.

Krieger, A.: A description of a modification of Armstrong's method for the detection of aromatic hydrocarbons and petroleum spirit in turpentine.—Chem. Ztg. 1916, v. 40, p. 472–473; see also J. Soc. Chem. Ind. 1916, v. 35, p. 746.

Coen: A description of a method for the detection of camphor oil in oil of turpentine. An abstract.—Ann. Falsif. 1916, v. 9, p. 318.

Hollande, A. Ch.: Methods for the identification of petroleum oil and oil of turpentine in the pus of abscesses caused by the subcutaneous injection of these substances.—J. pharm. et chim. 1916, v. 13, p. 337–340; also see Chem. Abstr. 1916, v. 10, p. 2357.

Prins, H. J.: A study of the isomerization, polymerization, and addition reactions of α-pinine.—Chem. Weekblad, 1916, v. 13, p. 1294–1296.

Rimini, Enrico: A note on the transformation of nopinine.—Gaz. Chim. Ital. 1916, v. 46, p. 119–121.

Anon.: Of 45 samples of oil of turpentine examined, 6 were rejected for being of poor quality.—Rep. Connecticut D. & F. Com. 1916, p. 19.

Barnard, H. E.: One sample of oil of turpentine examined was rejected for being adulterated.—Bull. Indiana Bd. Health, 1916, v. 19, p. 112.

Congdon, Leon A.: One sample of spirit of turpentine examined was not of U. S. P. quality.—Rep. Kansas Bd. Health, 1916, p. 133.

OLEUM THYMI.

Clampett, G. W.: Of seven samples of oil of thyme examined, the thymol content ranged from 16 to 30 per cent.—Proc. Texas Pharm. Assoc. 1916, p. 80.

OLEATUM HYDRARGYRI.

Murray, B. L.: A description of an electrolytic method for the determination of mercury in oleate of mercury.—J. Ind. & Eng. Chem. 1916, v. 8, p. 257.

OLEORESINA ASPIDII.

Anon.: The specific gravity, refractive index, solubility in various solvents, content of filicic acid, and various other features are now well defined, and a determination of these values is a certain safeguard against adulteration. But the compilers of the U. S. P. IX have not included one single test for this important substance.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 302; see also Chem. & Drug. 1916, v. 88, No. 1921, p. 45.

OPII PULVIS.

Ewe, G. E.: Of three samples of powdered opium assayed, the crystalline morphine content of one was above standard and two below.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

Vanderkleed, C. E.: Six lots of powdered opium examined assayed from 11.84 to 12.58 per cent of morphine.—J. Am. Pharm. Assoc. 1916, v. 5, p. 542.

OPIUM.

Svirlevski: Notes on the cultivation of the poppy in Persia and on the preparation of opium therefrom. The morphine content generally varies from 4.4 to 11.1 per cent. An abstract.—J. pharm. et chim. 1916, v. 13, p. 387.

Kehl, John E.: Drug and chemical situation in Greek Macedonia. The quantity of opium shipped from Saloniki during the year amounted to 173 metric tons. Of this amount, 161,849 pounds found its way to the United States.—Com. Rep. 1916, No. 5, p. 93.

Anon.: The importations of opium into the United States dropped from 400,000 pounds in 1914 to 300,000 pounds in 1915.—Com. Rep. 1916, No. 14, p. 243.

Wilbert, M. I.: A review of the recognition accorded to opium, its preparations, alkaloids, and derivatives in the several editions of the United States Pharmacopœia.—J. Am. Pharm. Assoc. 1916, v. 5, p. 688–693.

Holmes, E. M.: In specifying the source of opium, it is not understood why the variety *album* De Condolle is mentioned, as it would be impossible to state whether any specimen of opium had been collected from the purplish-red or white-flowered variety.—Pharm. J. 1916, v. 97, p. 485.

Beringer, George M.: According to the specifications of the new edition of the U. S. P., opium must now contain not less than 9.5 per cent of anhydrous morphine instead of not less than 9 per cent of crystallized morphine as in the older edition.—Am. Druggist, 1916, v. 64, No. 8, p. 24.

Smith, Carl E.: A comparison of the U. S. P. and Ph. Brit. methods for the assay of opium. The author concludes that the foregoing methods give fairly accurate results with a tendency toward high results. For rapid approximate results he favors lime methods of the type adopted by the Ph. Germ. V.—Am. J. Pharm. 1916, v. 88, p. 292–301.

Guerin, C.: A new modification of the lime method for the assay of opium is described. An abstract.—C. U. C. P. Alumni J. 1916, v. 23, p. 168.

Shilston, H. P.: Data obtained in routine morphinometric assays of opium by a slightly modified Ph. Brit. method.—Chem. News, 1916, v. 114, p. 273–275.

Vanderkleed, C. E., and Ewe, G. E.: The impression is quite prevalent that if, in conducting an opium assay, the morphine is allowed to stand for crystallization for a longer time than 16 hours, the morphine will be less pure and more difficult to filter off and wash. Experiments conducted by the authors show that this impression is erroneous.—J. Am. Pharm. Assoc. 1916, v. 5, p. 717–718.

Summers, F. P., et al.: A discussion of assay methods for surgical dressings and opium preparations.—Chem. Abstr. 1916, v. 10, p. 1402.

Anon.: Of 102 samples of Indian opium examined at the Imperial Institute, 51 showed an average morphine content of 10.26 per cent, 21 contained only 7.5 per cent, and 30 contained so little morphine that they were of no medicinal value.—Pharm. Weekblad, 1916, v. 53, p. 797.

Anon.: The crystalline morphine content of four samples of opium was above standard. One sample assayed 20.32 per cent.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

Vanderkleed, C. E.: The morphine content of nine samples of opium examined ranged between 11.31 and 12.35 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 542.

Greenish, Henry G.: An illustrated account of the preparation of smoking opium.—Pharm. J. 1916, v. 96, p. 517–518.

Simons, Frank D.: Investigations relative to the comparison and identification of various types of smoking opium.—J. Ind. & Eng. Chem. 1916, v. 8, p. 345–351.

Thum, John K.: A review of the annual report of the chemical laboratory of the American Medical Association, volume 8, directs attention to the data given therein on the examination of commercial specimens of opium alkaloids.—Am. J. Pharm. 1916, v. 88, p. 574.

Perkin, Wm. H., jr.: A report of researches dealing with the composition and properties of cryptopine and protopine, two rare opium alkaloids.—J. Chem. Soc. Lond. 1916, v. 109, part 2, p. 815–1028.

Stephan, A.: A description of a method for preparing a 10 per cent sterile solution of the glycerophosphates of the total alkaloids of opium. The preparation contains 50 per cent of morphine and 20 per cent of secondary alkaloids and is sold under the name of "glykopon."—Chem. Zentralbl. 1916, v. 87, part 2, p. 514 from Apoth.-Ztg. 1916, v. 31, p. 351.

Mayer, F.: Holopon is obtained from opium by means of ultrafiltration. It is an aqueous solution containing all the active constituents of opium in their natural quantitative relationship freed from disturbing ballast as fats, resins, wax, and proteins. Three parts of the clear light brown fluid correspond to one part opium. It can be administered subcutaneously, intramuscularly, and intravenously.—Deutsch. med. Wchnschr. 1916, v. 42, p. 224–225 through Chem. Abstr. 1916, v. 10, p. 1690.

Schlomer, George: A report on the use of holopon, a new opium preparation, in neurology and psychiatry.—Deutsch. med. Wchnschr. 1916, v. 42, p. 1008.

Macht, David I., Herman, N. B., and Levy, Chas. S.: A quantitative study of the analgesia produced by opium alkaloids, individually and in combination with each other, in normal man.—Rep. Therap. Res. Com. 1916, v. 5, p. 27–61; J. Pharmacol. & Exper. Therap. 1916, v. 8, p. 1–37.

Macht, David I.: A study of the peripheral action of the alkaloids, with special reference to the effect on the sensory nerve terminals.—J. Pharmacol. & Exper. Therap. 1916, v. 8, p. 451–463.

Jackson, Dennis E.: A report of researches relative to the peripheral action of opium alkaloids, with special reference to the bladder.—J. Lab. & Clin. Med. 1916, v. 1, p. 862–879.

Macht, David I.: Researches to determine the action of opium alkaloids on the ducts of the testis.—J. Pharm. 1916, v. 9, p. 121–127.

Macht, David I.: A comparative study of the effects of opium derivatives, individually and in combination with each other, on the gall bladder.—J. Pharmacol. & Exper. Therap. 1916, v. 9, p. 473–481.

Editorial: A discussion of the effect of certain opium alkaloids upon respiration.—J. Am. M. Assoc. 1916, v. 66, p. 514–515.

Macht, David I.: A report of an investigation of the pharmacological action of papaverine.—Arch. Int. Med. 1916, v. 17, p. 786–806.

Wood, Horatio C.: A discussion of the value of opium as a local remedy.—J. Am. M. Assoc. 1916, v. 66, p. 1072–1073.

OVI VITELLUM RECENS, N. F.

Spohn, Adelaide, and Riddle, Oscar: Data showing the composition of white and yellow egg yolk of the common fowl and the pigeon are given.—Am. J. Physiol. 1916, v. 41, p. 397–408.

Anon.: The principal pigment of egg yolk is stated to belong to the xanthophyll group of plant pigments. The color of the yolk may therefore be controlled by feeding the proper amounts of xanthophyll containing foods.—Pharm. J. 1916, v. 96, p. 445.

Anon.: A description of tests for the evaluation of egg yolk.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 99.

Bandrexel, A.: A description of a biological method for the positive determination of the presence of a preservative in egg yolk.—Chem. Abstr. 1916, v. 10, p. 2942.

OVUM GALLINACEUM, N. F.

Pennington, M. E.: A study of packing-house conditions with laboratory data furnish information relative to the proper handling of eggs in egg-breaking houses to insure a clean product.—Bull. U. S. Dept. Agric. 1916, No. 224, p. 1–99.

Gruber, H. T.: A pepsin test for determining the freshness of eggs is described in detail. The test is based on the fact that the digestibility of the albumen decreases with age.—J. Ind. & Eng. Chem. 1916, v. 8, p. 911.

Rettger, Leo F.: A report of feeding experiments with *Bacterium pullorum* to determine the toxicity of eggs infected with this organism.—J. Exper. M. 1916, v. 23, p. 475–489.

OXYGENIUM.

Smithhurst, P. A.: A compact apparatus for automatically generating and storing oxygen under pressure. British Patent No. 1,400, Jan. 28.—Chem. Abstr. 1916, v. 10, p. 1918.

Hazard-Flamand, M.: U. S. Patent No. 1,201,043–4. An apparatus and method for fractionally liquifying oxygen from the air.—Chem. Abstr. 1916, v. 10, p. 3142.

MacArthur, C. G.: Data showing the solubility of oxygen in salt solutions and the hydrates of these salts are presented.—J. Phys. Chem. 1916, v. 20, p. 495–502.

Anon.: A discussion of the uses of ozone in chemical research and in the industries.—Chem. News, 1916, v. 113, p. 193–196 and 205–206.

Anon.: In connection with a description of a breathing apparatus, the effects of breathing pure undiluted oxygen are discussed. Contrary to general opinion, no marked effects are noticeable.—Scientific American, 1916, May 13, p. 507.

Wood, W. A.: A method for the continuous oxygenation of wounds with oxygen under a pressure of 3 to 4 pounds is described.—Brit. M. J. 1915, v. 2, p. 503.

Dumarest: The repeated injection of oxygen is recommended in the treatment of "frost foot." The treatment is reported to have given excellent results in a number of cases. An abstract.—Pharm. J. 1916, v. 96, p. 133.

PANCREATINUM.

Long, J. H., et al.: A report of investigations to determine the digestive activity and composition of different fractions of the pancreas. The different fractions were obtained by centrifuging the minced tissues.—Rep. Therap. Res. Com. 1916, v. 5, p. 22–26.

Long, J. H., et al.: A report of researches to determine whether or not trypsin is destroyed by pepsin and acid. It was found that when the acid concentration is reduced to P_H=2.6 or less, tryptic activity persists for several hours at the body temperature.—J. Am. Chem. Soc. 1916, v. 38, p. 1620–1638.

Long and Fenger: From work on the pancreatic glands of sheep, hogs, and oxen, these authors confirm their original statements with reference to the acidity of fresh secretions.—J. Am. Chem. Soc. 1916, v. 38, p. 1115.

Leviton, Max B.: The effect of pancreatin in the treatment of goiter. In two cases of exophthalmic goiter, there was a complete cessation of exophthalmic symptoms with a recession of the goiter after rectal administration of pancreatin (dosage, about 15 to 20 grains two or three times a day).—J. Am. M. Assoc. 1916, v. 66, p. 50.

PAPAVERIS FRUCTUS, N. F.

Anon.: Notes on the cultivation of the poppy plant in Macedonia. —Oil, Paint & Drug Rep. 1916, v. 90, No. 20, p. 26.

Alsberg, C. L.: The attention of the Bureau of Chemistry has been called to the fact that commercial poppy seed sometimes contains the seed of henbane.—S. R. A.-Chem. 1916, No. 18, p. 43.

True, R. H., and Stockberger, W. W.: A report of physiological observations on alkaloids, latex, and oxidases in *Papaver somniferum*. —Am. J. Bot. 1916, v. 3, p. 1–11.

PARACOTO, N. F.

Iodbauer, A., and Kurz, S.: An investigation of the biological action of cotoin, paracotoin, hydrocotoin, and allied substances obtained from coto and paracoto bark.—Physiol. Abstr. 1916, v. 1, p. 329 from Biochem. Ztschr. 1916, v. 74, p. 340–356.

PARAFFINUM.

Mijs, J.: U. S. Patent No. 1,178,532. A method for purifying paraffin. A preliminary purification is effected by treatment with sulphuric acid, the oil is then mixed with an equal weight of toluene at 50–80° C. The insoluble matter is removed and the solution allowed to cool when the paraffin separates.—Chem. Abstr. 1916, v. 10, p. 1593.

Peczalski, Thadée: A report of an investigation of the effect of temperature on the structure of paraffin.—Compt. rend. acad. sc. 1916, v. 162, p. 784–786; see also Chem. Abstr. 1916, v. 10, p. 2061.

Anon.: By heating petroleum distillates with lime and caustic soda, or a mixture of sulphuric and nitric acids, products which are soluble in alkaline solutions are obtained. An abstract.—Chem. & Drug. 1916, v. 88, p. 70.

Anon.: Notes on the use of paraffin and mixtures of petrolatum and soft paraffin for the injection of fistulous tracts produced by wounds of war.—J. Am. M. Assoc. 1916, v. 67, p. 897.

PARALDEHYDUM.

Orton, Kennedy J. P., and McKie, Phyllis V.: A description of a process for the estimation of paracetaldehyde and acetal in mixtures of the two. The method is based on the fact that acetal is

rapidly decomposed by heating with traces of strong acids, whereas paracetaldehyde is not.—J. Chem. Soc. Lond. 1916, v. 109, p. 184–186.

PASTÆ DERMATOLOGICÆ.

Unna: Formulas for the preparation of a number of medicated pastes in which syrup is used in place of glycerin are presented.—Yearbook of Pharmacy, 1916, p. 43, from Schweiz.—Apoth.-Ztg. 1916, v. 54, p. 296.

Ochsner: A formula for Unna's paste intended for use in the treatment of varicose veins is given.—J. Am. M. Assoc. 1916, v. 67, p. 1617.

PELLETIERINÆ TANNAS.

Loup: A report of a pharmacological study of pelletierine.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 476–478.

PEPSINUM.

Ringer, W. E.: An investigation of the properties of pure pepsin.—Physiol. Abstr. 1916, v. 1, p. 39, from Kolloid-Ztschr. 1916, v. 19, p. 253–276.

Aldrich, T. B.: Data showing the relationship of the total nitrogen and α-amino nitrogen content of pepsin to its activity.—Physiol. Abstr. 1916, v. 1, p. 40.

Rakuzin, M. A., et al.: A discussion of the limits of sensitiveness of color reactions for pepsin and other enzymes.—Chem. Abstr. 1916, v. 10, p. 1655.

Summers, F. P. et al.: Comments on the methods in vogue for the testing of pepsin. Chem. Abstr. 1916, v. 10, p. 1402.

Graber, Howard T.: From experiments on the testing of pepsin with eggs of different ages, it is concluded that the strength of the pepsin can be determined by the age of the egg used in the test and vice versa.—J. Ind. & Eng. Chem. 1916, v. 8, p. 911.

Vanderkleed, C. E., and E'we, G. E.: Experiments conducted by the authors indicate that it is not necessary to read the volume of undissolved albumen obtained in the pepsin assay at exactly the end of one-half hour. Reading the volume after standing over night yields identical results.—J. Am. Pharm. Assoc. 1916, v. 5, p. 718.

Okada Seizaburo: Experimental data showing the optimal hydrogen ion concentration for the action of pepsin.—Biochem. J. 1916, v. 10, p. 126–129.

Long, J. H., and Hull, Mary: On the assumed destruction of trypsin by pepsin and acid. Trypsin is not destroyed in the presence of protein when the acid concentration is $P_H=2.6$, or below.—Rep. Therap. Res. Com. 1916, v. 5, p. 124–149; see also J. Am. Chem. Soc. 1916, v. 38, p. 1620–1638.

Ramsay, C. F.: In a study of the retarding effect of certain substances upon pepsin digestion, the author finds that the added constituents in the preparations of the N. F. do not inhibit the activity of pepsin, at least in so far as the test applied is concerned.—J. Am. Pharm. Assoc. 1916, v. 5, p. 30–33.

Hamburger, W. W., and Halpern, B.: A study of the effect of salts on pepsin. Sodium chloride (25 per cent) completely inhibits peptic activity. This is also a property of many other salts.—Arch. Int. Med. 1916, v. 18, p. 228–234.

Gregersen, J. P. A.: A study of the antiseptic value of gastric juice. The bacterial action of gastric juice depends entirely on the presence of hydrochloric acid.—Centralb. f. Bakteriol. 1915, v. 77, p. 353–361.

PERSIO, N. F.

E'we, G. E.: The ash yield of six samples of cudbear examined ranged from 7.62 per cent to 60.7 per cent.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 112.

PETROLATUM LIQUIDUM.

Andrews, W. A. P.: A discussion of the origin of the different paraffin oils and of their physical and chemical properties.—Proc. Utah Pharm. Assoc. 1916, p. 64–79.

Puckner, W. A.: A description of liquid petrolatum—Squibb, a heavy California oil.—J. Am. M. Assoc. 1916, v. 67, p. 953.

Scoville, W. L.: The disappearance of the Russian oil from the market caused much trouble for a time, but the conditions now are met satisfactorily with American oils and the Russian oil is no longer missed.—J. Am. Pharm. Assoc. 1916, v. 5, p. 542.

Vanderkleed, C. E.: The Russian oil being practically unobtainable, recourse must now be had to oil from other sources. These oils are difficult to obtain free from kerosene taste and fluorescence and are much lower in specific gravity than is desirable.—J. Am. Pharm. Assoc. 1916, v. 5, p. 542.

Humphreys, R. E.: A short discussion of the methods of preparation, properties of, and tests for petroleum white oils.—J. Am. Pharm. Assoc. 1916, v. 5, p. 304–305.

Brooks, Benjamin T.: The available chemical tests for liquid petrolatum are of no value. If the object of the sulphuric-nitric acid test is nitration, then it should be carried out differently, as Namjetkin has shown that dilute nitric acid, specific gravity about 1.30, is best for nitrating paraffins and naphthenes.—J. Am. M. Assoc. 1916, v. 66, p. 24–26.

Editorial: According to Benjamin T. Brooks, the American petroleums from the Gulf region, like the Russian, contain no paraffin hydrocarbons. In the case of the American petroleums that do contain paraffins, the customary refining methods for removing them are sufficient for producing true naphthene and polynaphthene petrolatums. The claim that only Russian oils belong to this class has no basis in fact and has been advanced presumably for business reasons.—J. Am. M. Assoc. 1916, v. 66, p. 38.

Briggs, C. H., and Irwin, W. L.: A presentation of experimental data showing the applicability of the bromine test to the detection of minute quantities of unsaturated hydrocarbon in liquid paraffin.—J. Am. Pharm. Assoc. 1916, v. 5, p. 709–711.

Anon.: Data obtained in the examination of a number of samples of American liquid paraffin. The specimens examined were low in specific gravity and did not conform to the requirements of the Ph. Brit. in other respects.—Lancet, 1916, v. 191, p. 293–294.

Patch, E. L.: The specific gravity of the 12 samples of liquid paraffin examined ranged between 0.837 and 0.880 at 25° C. Only 4 of the samples were fluorescent. Several of them gave a dark color with the sulphuric-acid test.—J. Am. Pharm. Assoc. 1916, v. 5, p. 542.

Roberts, J. G.: Seven lots of medicinal paraffin oil of domestic origin examined were clear, white products, free from fluorescence, odor, and taste, neutral to litmus, and had specific gravities ranging from 0.833 to 0.853 at 25° C.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 114.

Swift, E. G.: Much of the liquid petrolatum offered has a kerosene odor and taste, and some samples darkened markedly with sulphuric acid.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

Terry, Robert W.: All of the samples of liquid petrolatum examined were excellent in physical conditions. All of them were colorless, without fluorescence. All were odorless when cold except three. All were tasteless except one, which had a slightly oily taste. Three samples contained traces of sulphur compounds and some of the samples contained traces of unsaturated hydrocarbons.—Midl. Drug. 1916, v. 50, p. 384–385.

Geyser, Albert C.: Notes on the physiology of medicinal petroleum oil and its use as a therapeutic agent.—Am. Med. 1916, v. 22, p. 106–108.

Barker, C.: Liquid paraffin is stated to be an excellent dressing for burns of the first and second degree. It is not satisfactory in burns of the third degree.—New York M. J. 1916, v. 102, p. 1197.

PETROSELINUM.

Anon.: A short note giving information relative to the cultivation of parsley in America.—N. A. R. D. J. 1916, v. 21, p. 703.

PETROXOLINUM LIQUIDUM, N. F.

Anon.: Notes on the preparation of liquid petroxolin.—N. A. R. D. J. 1916, v. 23, p. 11.

Hilton, S. L.: The formula as changed in the N. F. IV works satisfactorily when Russian liquid petrolatum is used, but is not as satisfactory as the old formula when the American oil is used.—Bull. Pharm. 1916, v. 30, p. 281.

PHENOL.

Rordorf, Helene: Phenol, when red in color, can be purified by distillation from a 1.5-liter flask and an air condenser consisting of a glass tube 1.5 meters long. Crystallization of the distillate upon standing yields a phenol containing more than 90 per cent C_6H_5OH.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 237–238.

Anon.: To prevent carbolic acid from becoming colored, it must be freed from iron and be kept in iron-free containers (bottles coated inside with paraffin are very good for this purpose).—Pract. Drug. 1916, v. 34, No. 10, p. 35.

Forbing, John W.: A discussion of the selection and technique of an appropriate method for the quantitative determination of phenol. A modified Koppeschaar method is suggested as being the most practical for the pharmacist.—J. Am. Pharm. Assoc. 1916, v. 5, p. 166–169.

Krak, J. B.: Descriptions of methods for the determination of phenol and salicylic acid in antiseptic gauze and cotton.—Chem. Analyst, 1916, v. 17, p. 14–15.

Bramley, Arthur: A study of binary mixtures. Part I. The densities and viscosities of mixtures containing phenol.—J. Chem. Soc. Lond. 1916, v. 109, p. 10–45.

Swift, E. G.: High-grade phenol is scarce. Much of that offered is dark in color, has a foreign odor, and low melting point.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

Congdon, Leon A.: Two samples of carbolic acid were rejected, as they contained glycerin and were not of official strength.—Bull. Kansas Bd. Health, 1916, p. 5.

Table showing some of the analytical results reported for phenol.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Barnard, H. E.	18	4	Bull. Indiana Bd. Health, 1916, v. 19, p. 125.
Congdon, Leon A.	11	7	Rep. Kansas Bd. Health, 1916, p. 133.
Frary, Guy G.	6	3	Rep. South Dakota F. & D. Com. 1916, No. 16, p. 149–150.
Roberts, J. G.	1	1	Proc. Pennsylvania Pharm. Assoc. 1916, p. 116.
Todd, A. R.	1	1	Bull. Michigan D. & F. Dept. 1916, No. 241–247, p. 20.

Dubin, Harry.: A dissertation on the physiology of the phenols.—J. Biol. Chem. 1916, v. 26, p. 69–91.

Anon.: On the value of sodium sulphate as an antidote for phenol (carbolic acid) poisoning.—J. Am. M. Assoc. 1916, v. 67, p. 535.

Wilbert, M. I.: The author points out the lack of value of alcohol as an antidote for phenol.—J. Am. M. Assoc. 1916, v. 67, p. 233.

PHENOL IODATUM, N. F.

Ott and Roy: A report on the treatment of diphtheria carriers with iodized phenol. A review of a number of cases.—J. Am. M. Assoc. 1916, v. 66, p. 800–802.

PHENOL LIQUEFACTUM.

Congdon, Leon A.: Two samples of liquified phenol examined were found to contain glycerin.—Bull. Kansas Bd. Health, 1916, v. 12, p. 7.

Sayre, L. E.: Of four samples of liquified phenol examined, one was adulterated and one was below standard.—Bull. Kansas Bd. Health, 1916, p. 12.

Stinson, Ray: Eighteen of the sixty-three samples of liquified phenol examined were below standard.—Proc. North Dakota Pharm. Assoc. 1916, p. 111.

PHENOLPHTHALEINUM.

Puente, Carlos: A study of the chemistry and pharmacy of phenolphthalein.—Farm. Espan. 1916, v. 48, p. 417–420, 433–435, 449–451, 465–468, 482–486.

von Sztankay, A., and Geyer, C.: German Patent 286,020. A process for the preparation of compounds of phenolphthalein with alkali carbonates. These compounds are stated to be of therapeutic value.—Chem. Abstr. 1916, v. 10, p. 1079.

Annibale, Ferraro: From experiments it is concluded that alcoholic extracts should be diluted with about twice their volume of water before titrating with phenolphthalein as an indicator. If not, low results will be obtained.—Boll. chim.-farm. 1915, v. 54, p. 257–258.

PHENYLIS SALICYLAS.

Levi, A.: Measurements of the thermal expansion of salol using a dilatometer with mercury as the contact liquid are given. The specific volume at the fusion temperature (40.6° C.) was found to be 0.774 for the solid phase and 0.846 for the liquid phase.—Chem. Abstr. 1916, v. 10, p. 1129.

Salkover, Benedict: A description of a quantitative method for determining salol and acetanilid in mixtures of the two, also salol and acetphenetidin in their mixtures. The method is based on the

difference in the solubility of these substances in petroleum ether.—Am. J. Pharm. 1916, v. 88, p. 484–485.

Anon.: Attention is called to the fact that salol and cuquinine are physically incompatible, giving a damp, oily mass when mixed.—Chem. & Drug. 1916, v. 88, p. 1057.

PHOSPHORUS.

Bridgman, P. W.: A report of investigations dealing with the different allotropic forms of phosphorus. A white, two varieties of red, and a black phosphorus are mentioned. Methods for producing the black modification are discussed in detail.—J. Am. Chem. Soc. 1916, v. 38, p. 609–612; see also A. Smits et al. Chem. Abstr. 1916, v. 10, p. 1480.

Lemkes, H. J.: The Dusart-Blondelot test for phosphorus was found to be very sensitive and is recommended for toxicological work if carried out at 50° to 60° C. with sufficient zinc.—Pharm. Weekblad. 1916, v. 53, p. 1496–1513.

PHYSOSTIGMA.

Sharp, Gordon: A history of Calabar bean and its introduction into medicine.—Pharm. J. 1916, v. 96, p. 619-620.

Schneider, Albert: The measurements for physostigma starch are given as "from 0.005 to 0.15 mm." (5 to 150 microns), whereas none of the granules exceed 85 microns in longest diameter.—Drug. Circ. 1916, v. 60, p. 692.

Polonovski, Max, and Nitzberg, Ch.: Alkaloids of the Calabar bean. IV. A partial synthesis of eserine and geneserine.—Bull. soc. chim. France, 1916, v. 19, p. 27-37 and 46-59; see also Chem. Abstr. 1916, v. 10, p. 1165.

Anon.: The ether-soluble alkaloidal content of one sample of Calabar bean assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

PHYSOSTIGMINÆ SALICYLAS.

Gifford, Harold: Physostigmine, in some form, is now generally applied after homatropine refraction tests, but I have a decided impression that it is not used as often or as thoroughly as it should be.—J. Am. M. Assoc. 1916, v. 67, p. 113.

PILOCARPINÆ HYDROCHLORIDUM.

McGuigan, Hugh: A study of the influence of atropine and pilocarpine on the glycogenic function. Pilocarpine, even in large doses, does not produce a significant increase in blood sugar, but causes a reduction after some hours.—J. Pharmacol. & Exper. Therap. 1916, v. 8, p. 407-415.

PILOCARPUS.

Schneider, Albert: Pilocarpus powder is never "dark green," as described in the U. S. P. IX.—Drug. Circ. 1916, v. 60, p. 693.

E'we, G. E.: Of 13 samples of pilocarpus assayed, the alkaloidal content of 5 was above standard and 8 below.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

PILULÆ.

Diekman, George C.: The number of official pills in the U. S. P. has been reduced from 14 to 7. The absence of the former array of pills containing aloes is of special note.—Pract. Drug. 1916, v. 34, No. 10, p. 25.

Danzel, L.: A powder consisting of a mixture of powdered licorice root, powdered tragacanth, powdered almond oil soap, wheat groats starch, sugar and hydrated magnesia is recommended as an excipient for making pills from liquids or viscous substances.—Drug. Circ. 1916, v. 60, p. 486.

De G. Peacock, J. C. and B. L.: An account of experiences with the salol coating of pills.—Pacific Pharm. 1916, v. 9, p. 266-268.

Toplis, Wm. G.: Comments on the value of stearic acid as a coating for enteric pills, with a description of the method of applying the coating.—Nat. Druggist, 1916, v. 46, p. 20.

PILULÆ FERRI CARBONATIS.

Thum, John K.: In a review of the annual report of the chemical laboratory of the American Medical Association, volume 8, attention is especially directed to the results obtained in the analyses of commercial samples of Blaud's pills.—Am. J. Pharm. 1916, v. 88, p. 574.

Wood, H. C., Jr.: Ten minims of the tincture of ferric chloride contains less iron than a single Blaud's pill.—J. Am. M. Assoc. 1916, v. 66, p. 1072.

Vanderkleed, C. E.: The samples of Blaud's pills examined contained from 77 to 182 per cent of the claimed carbonate of iron content.—J. Am. Pharm. Assoc. 1916, v. 5, p. 537.

PIPULÆ FERRI IODIDI.

Diekman, George C.: It is difficult to conceive why an assay process is not provided by the U. S. P. for pills of ferrous iodide. The fact that these pills are to be coated with balsam of tolu does not entirely insure them against decomposition.—Pract. Drug. 1916, v. 34, No. 10, p. 25.

PIMENTA, N. F.

Frary, Guy G.: All of the six samples of allspice examined were of standard quality.—Rep. South Dakota F. & D. Com. 1916, No. 16, p. 133–134.

PINUS ALBA, N. F.

Anon.: A short note giving information relative to the production and collection of white pine bark in America.—N. A. R. D. J. 1916, v. 21, p. 916.

PIPER.

Memminger, Lucien: Notes on the cultivation and preparation of pepper for the market in India.—Com. Rep. 1916, No. 26, p. 442.

Anon.: A note on the history of pepper.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 48–49.

Salamon, M. S., and Seaber, W. M.: Analytical data obtained in the analysis of white pepper are presented.—Chem. & Drug. 1916, v. 88, p. 146–147.

Lagerheim, G.: A positive reaction of white pepper with Storch's reagent is stated to indicate adulteration. Storch's reagent consists of 2 per cent $p-C_6H_3(NH_2)_2$ and 1 per cent H_2O_2 in aqeous solution.—Svensk Farm. Tidsskr. 1916, v. 20, p. 357–361.

Frary, Guy G.: Six of the 22 samples of pepper examined were rejected because they were not of standard quality.—Rep. South Dakota F. & D. Com. 1916, No. 16, p. 137–138.

PIX LIQUIDA.

Rusby, H. H.: The definition of tar as "a product obtained by the destructive distillation of the wood of," etc., presents a wretched appearance when contrasted with that of the former edition, which defined it as "an empyreumatic oleo-resin," etc. So far as the present definition is concerned, it applies equally well to the charcoal that results from the distillation.—Drug. Circ. 1916, v. 60, p. 537.

PLUMBI ACETAS.

Smith, G. E.: A study of the factors controlling the reactions of lead acetate and lead nitrate with disodium arsenate.—J. Am. Chem. Soc. 1916, v. 38, p. 2014–2027.

PLUMBI CARBONAS, N. F.

Sharpe, F. H.: French Patent No. 479,219. A mechanical mixing and reaction vessel for carbonating lead oxide is described.—Chem. Abstr. 1916, v. 10, p. 2308.

PLUMBI OXIDUM.

Torossian, Gregory: A simple and rapid method for the approximate quantitative determination of lead, with a table showing the results obtained in the analysis of a number of lead compounds.—J. Ind. & Eng. Chem. 1916, v. 8, p. 331.

PLUMBI OXIDUM RUBRUM, N. F.

Thompson, G. W.: In discussing the value of highly oxidized red lead, the author states that the ordinary product contains from 70 to 100 per cent of Pb_3O_4. The remainder consists principally of litharge.—Chem. Abstr. 1916, v. 10, p. 2804.

Schaeffer, John A.: A description of a rapid method for the analysis of red lead and orange mineral.—J. Ind. & Eng. Chem. 1916, v. 8, p. 237–238.

Milbauer, Jaroslav: A report of investigations to determine the influence of the impurities in red lead on its color when used in paints and varnishes.—Chem. Ztg. 1915, v. 39, p. 858–859.

PODOPHYLLUM.

E'we, G. E.: Of nine samples of mandrake assayed the resin content of four was above standard and five below.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

POTASSA SULPHURATA.

Roberts, J. G.: A lot of sulphurated potash in 1-pound cans was rejected, as it had greatly deteriorated in strength.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 118.

POTASSII BITARTRAS.

Vecchia, L.: Notes on the cold extraction of potassium bitartrate from grape marcs by Cambiaggi's method.—Chem. Abstr. 1916, v. 10, p. 2959.

Kantor: A report of results obtained in the application of Sander's picric acid method to the determination of potassium bitartrate.—Chem. Abstr. 1916, v. 10, p. 439.

Kunz, R.: Methods for the determination of total tartaric acid, alkaline earth tartrates, potassium bitartrate, and free tartaric acid in wine are described.—Arch. Chem. Mikros. 1915, v. 8, p. 51–61.

POTASSII BROMIDUM.

Beringer, George M.: The purity of potassium bromide has been increased from 97 per cent absolute bromide in the eighth revision to 98.5 per cent in the ninth revision.—Am. Druggist, 1916, v. 64, No. 8, p. 23.

Anon.: The appearance of adulterated potassium bromide on the New York market is reported. The samples examined were found to consist of about 90 per cent of granulated sugar.—West. Pennsylvania Ret. Drug. 1916, February, p. 14.

Lilly, J. K.: Some of the potassium bromide examined was found to contain 10 per cent of potassium carbonate.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

Stinson, Ray: All of the 22 samples of potassium bromide examined were of U. S. P. standard.—Proc. North Dakota Pharm. Assoc. 1916, p. 112.

POTASSII CHLORAS.

Taylor, Guy B., and Cope, W. C.: Experimental data showing the hygroscopic properties of potassium chlorate and other substances used in the manufacture of detonators are presented.—Chem. Abstr. 1916, v. 10, p. 2799.

Salvadori, R.: An investigation of the action of ammonium nitrate upon potassium chlorate.—Ann. chim. applicata, 1916, v. 6, p. 115–118.

Rowland, Floyd E.: An account of an unusual explosion in connection with potassium chlorate.—J. Ind. & Eng. Chem, 1916, v. 8, p. 517–518.

Squire, E. W.: A report of a case of poisoning in a 4½ months child due to the ingestion of potassium chlorate.—Brit. M. J. 1916, v. 1, p. 450.

POTASSII CHLORIDUM, N. F.

Von Kolnitz, G. F.: U. S. Patent No. 1,201,396. A process for the preparation of potassium chloride from greensand. The greensand mixed with $CaCl_2$ is heated to 900° C. in a reducing atmosphere. The KCl is recovered by leaching.—Chem. Abstr. 1916, v. 10, p. 3142.

Amberg, S., and Helmholtz, H. F.: The fatal dose of a 2 per cent solution of potassium chloride when injected intravenously is 1 cubic centimeter for a guinea pig weighing 260 grams.—Chem. Abstr. 1916, v. 10, p. 2598.

POTASSII FERROCYANIDUM.

Denigès, G.: An illustrated discussion of a new theory concerning the structural formulas of the ferrocyanides.—Bull, soc. chim. France, 1916, v. 19 and 20, p. 79-90.

POTASSII HYDROXIDUM.

Rolland, Charles-Pierre: French Patent No. 478,372. An electrolytic process for the manufacture of potassium hydroxide from solutions of potassium sulphate.—Chem. Abstr. 1916, v. 10, p. 2172.

Baxter, Gregory P., and Starkweather, Howard W.: A report of investigations to determine the efficiency of calcium chloride, sodium hydroxide, and potassium hydroxide as drying agents.—J. Am. Chem. Soc. 1916, v. 38, p. 2038–2041.

POTASSII IODIDUM.

Riesenfeldt, E. H., and Bencker, F.: A report of experiments to determine the action of ozone on inorganic iodine compounds.—Ztschr. anorg. Chem. 1916, v. 98, p. 167–201.

Stinson, Ray: All of the 21 samples of potassium iodide examined were of U. S. P. standard.—Proc. North Dakota Pharm. Assoc. 1916, p. 112.

Wilcox, Reynold W.: A report of a case of acute potassium iodide poisoning in a man 35 years of age.—New York M. J. 1916, v. 103, p. 975-976.

POTASSII NITRAS.

Congdon, Leon A.: Of 10 samples of saltpeter examined, 3 were rejected for being of poor quality or adulterated.—Rep. Kansas Bd. Health, 1916, p. 133.

POTASSII PERMANGANAS.

Dewey, F. G.: Potassium permanganate is of no value in the treatment of rattlesnake bite when administered internally. It is a powerful oxidizing agent and if applied directly to the open wound it will destroy the venom with which it comes in direct contact—usually a very small amount.—J. Am. M. Assoc. 1916, v. 67, p. 462.

POTASSII SULPHAS, N. F.

Anon.: A reprint of the standards for potassium sulphate proposed by the committee on unofficial standards.—J. Am. Pharm. Assoc. 1916, v. 5, p. 88–89.

PRUNUS VIRGINIANA.

Anon.: A short note giving information relative to the production and collection of wild cherry bark in America.—N. A. R. D. J. 1916, v. 21, p. 1058.

Rusby, H. H.: Those in the best position for knowing the facts now declare that Linnæus was quite right in his description of the tree yielding our official wild cherry bark under the name *Prunus Virginiana*, and that the supposition, so long prevalent, that he erroneously described *Prunus serotina* is a mistake. The former should, therefore, be given as the source of this drug.—Drug. Circ. 1916, v. 60, p. 537.

Schneider, Albert: In the U. S. P. description of wild cherry, no mention is made of the branching or forked bast cells.—Drug. Circ. 1916, v. 60, p. 693.

PULSATILLA, N. F.

Pilcher, Delzell, and Burman: A report of investigations to determine the action of pulsatilla on the excised uterus of the guinea pig.—J. Am. M. Assoc. 1916, v. 67, p. 409–492.

PULVIS ANTISEPTICUS, N. F.

Anon.: Notes on the preparation of soluble antiseptic powder.—N. A. R. D. J. 1916, v. 22, p. 15.

QUASSIA.

Schneider, Albert: In the description of Surinam quassia, the U. S. P. has neglected to mention the diagnostic sclerenchyma cells.—Drug. Circ. 1916, v. 60, p. 693.

Patch, E. L.: The ash of six samples of quassia examined ranged between 2.2 to 8 per cent; the extractive between 3.3 and 7 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 543.

QUERCUS, N. F.

Anon.: A short note giving information relative to the production and collection of oak bark in America.—N. A. R. D. J. 1916, v. 21, p. 1056.

QUILLAJA, N. F.

Holmes, E. M.: Notes on the identity of a crystalline substance obtained from a glycerin extract of quillaja. The substance was found to be a calcium salt of an organic acid resembling quillaic acid.—Pharm. J. 1916, v. 96, p. 220.

QUININA.

Memminger, Lucien: A consular report on the output of quinine in Madras Presidency.—Com. Rep. 1916, No. 261, p. 487–488.

Christensen, A.: A report of investigations to determine the effect of chlorine on quinine in solution. Descriptions of a number of the compounds formed are given.—Chem. Abstr. 1916, v. 10, p. 47 from Ber. deutsch. pharm. Gesellsch. 1915, v. 25, p. 256–281.

Filippi, Eduardo: In a discussion of chemical and physiological methods for the identification of several alkaloids dissolved in the same solvent, the author describes a method for separating quinine from strychnine. The quinine is precipitated with Seignetti's salt.—Arch. farmacol. sper. 1916, v. 22, p. 120–130.

Scoville, W. L.: A note on the incompatibility of quinine with aspirin. Quinotoxin is formed when the powders are moist as aspirin is split into acetic and salicylic acids which latter react to form the toxic compound.—Bull. Pharm. 1916, v. 30, p. 336.

E'we, G. E.: The water content of samples of quinine examined was found to vary between 1.3 per cent to 14.3 per cent.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 116.

Vanderkleed, C. E.: The samples of quinine examined showed an extreme variation in water content. Nine lots gave from 0 to 20 per cent of water.—J. Am. Pharm. Assoc. 1916, v. 5, p. 543.

Barnard, H. E.: One sample of quinine examined was rejected.—Bull. Indiana Bd. Health, 1916, v. 19, p. 76.

Harms, Herman: Of 72 samples of quinine capsules examined, 19 were rejected for being of poor quality.—Rep. Utah D. & F. Com. 1916, p. 96.

Boerner, F.: A test to demonstrate idiosyncracy to medicinal doses of quinine is described.—J. Am. M. Assoc. 1916, v. 68, p. 907.

Smith, Maurice I., and Fantus, Bernard: A comparative study of the pharmacological action of quinine and ethylhydrocuprein (optochin).—J. Pharmacol. & Exper. Therap. 1916, v. 8, p. 53–74.

Morgenroth, J., and Tugendreich, J.: A study of the disinfectant action of quinine and some of its derivatives on streptococci.—Chem. Zentralbl. 1916, v. 87, part 2, p. 506–507.

Tweedy, Sir John: A report on the use of solutions of quinine as a dressing for infected wounds.—Brit. M. J. 1916, v. 1, p. 11–12.

RENNINUM, N. F.

Graber, Howard E.: A discussion of the factors causing the seasonal variation in coagulating power of milk, and of a corrected method of testing rennin.—J. Ind. & Eng. Chem. 1916, v. 8, p. 909–910.

Vanderkleed, C. E., and E'we, G. E.: Experiments on the assay of rennin show that the time required by the enzyme for coagulation of milk is inversely proportional to the amount of rennin employed.—J. Am. Pharm. Assoc. 1916, v. 5, p. 714–715.

Swift, E. G.: Rennin has almost disappeared from the market and the samples now offered for sale are usually low in strength.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

E'we, G. E.: Six lots of rennin examined ranged between 1:27,750 and 1:16,250 in milk coagulating power on a 7½-minute basis.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 116.

RESINA.

Cohn, Georg: Descriptions of methods for the identification of rosin and abietic acid.—Chem.-Ztg. 1916, v. 40, p. 791–792.

Merrill, E. C.: A report on the value of various resin tests.—J. Assoc. Off. Agric. Chem. 1916, v. 2, part 2, p. 82–87; see also Chem. Abstr. 1916, v. 10, p. 2384.

Hutin: A method for the determination of rosin in gum resins is described. The author states that only approximate results are obtained. An abstract.—C. U. C. P. Alumni J. 1916, v. 23, p. 219.

Reutter, Louis: Analyses showing the composition of two resinous masses used by the Incas in embalming their dead.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 136–140.

Storandt, W.: The production of rosin in Prussia. A general review.—Chem. Abstr. 1916, v. 10, p. 1442 from Seifensieder-Ztg. 1916, v. 43, p. 149.

RESINA JALAPÆ.

Holmes, E. M., and Passmore, F. W.: As a source of jalapin (resin of jalap insoluble in ether), the Brazilian jalap is twice as valuable as the Vera Cruz jalap, since it contains twice the standard quantity of resin required by the Ph. Brit.-Pharm. J. 1916, v. 41, p. 671.

Snyder, J. Paul: The U. S. P. VIII directions for determining the chloroform-soluble matter in resin of jalap are indefinite. The Pharmacopœia should state definitely the amounts of the sample and chloroform to be used, the method to be employed, and the length of time the resin should be treated with the solvent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 34–37.

Roberts, J. G.: One sample of resin of jalap examined was not of U. S. P. quality, as it contained 2.15 per cent more chloroform-soluble matter than the U. S. P. standard of not more than 35 per cent.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 116.

Vanderkleed, C. E.: One sample of resin of jalap examined was not completely soluble in five times its weight of ammonia water.—J. Am. Pharm. Assoc. 1916, v. 5, p. 540.

RESINA PODOPHYLLI.

Tanzen, Heinrich: After employing a number of different methods for the evaluation of podophyllin, the author concludes that the method of the Ph. Ndl. is the most practical for the pharmacist.—Chem. Zentralbl. 1916, v. 87, part 1, p. 998 from Arch. Pharm. 1915, v. 254, p. 44–49.

RESINA SCAMMONIÆ.

Beringer, George M.: The U. S. P. IX directs that scammony root be used in the preparation of the resin because virgin scammony is no longer obtainable.—Am. Druggist, 1916, v. 64, No. 8, p. 24.

Rusby, H. H.: It would have been a very wise action on the part of the revision committee to have introduced the resin of Mexican scammony under a separate title instead of leaving it out entirely, as is now the case.—Drug. Circ. 1916, v. 60, p. 537.

Roberts, J. G.: In three lots of resin of scammony examined, 46.54, 71.06, and 76.07 per cent of ether-soluble matter was found.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 117.

RESORCINOL.

Krauskopf, F. C., and Ritter, G.: A description of a color reaction with cobalt chloride for the detection of resorcinol in the presence of catechol, quinol, and pyrogallol.—J. Am. Chem. Soc. 1916, v. 38, p. 2182–2187.

Wolff, Jules: Descriptions of biochemical reactions which permit of differentiating between the three isomeric diphenols—pyrocatechol, hydroquinone, and resorcinol.—Compt. rend. soc. biol. 1916, v. 79, p. 1019–1020.

RHAMNUS CATHARTICA, N. F.

Tunmann, O.: Observations on the analysis of rhamnus barks. Methods for distinguishing between drugs of different species are discussed.—J. Chem. Soc. Lond. 1916, v. 110, p. 504 from Apoth.-Ztg. 1915, v. 30, p. 642.

RHEUM.

Anon.: Notes on the cultivation of rhubarb for medicinal use.—Northwestern Druggist (The), 1916, v. 17, No. 5, p. 36–37, No. 6, p. 36–37, No. 7, p. 39–40.

Tschirch, A., and Ruzzkowski, M.: A report on the value of samples of rhubarb obtained from the Altai Mountains. An assay by the Tschirch method showed 3.20 per cent of oxymethyl-anthraquinone. An abstract.—C. U. C. P. Alumni J., 1916, v. 23, p. 12.

Lilly, J. K.: One lot of rhubarb examined consisted of the rhapontic variety and was not U. S. P.—Oil, Paint & Drug Rep. 1916, No. 16, p. 46.

ROSA GALLICA.

Rusby, H. H.: Several shipments of "rose petals" have been received which consisted of the entire body with calyx attached.—J. Am. Pharm. Assoc. 1916, v. 5, p. 543.

RUBUS, N. F.

Anon.: A short note giving information relative to the production and collection of blackberry bark in America.—N. A. R. D. J. 1916, v. 21, p. 1058.

SACCHARUM.

Milius, H. C., and Schoorl, N.: Notes on the attempts to define sugars from an analytical chemical standpoint.—Pharm. Weekblad, 1916, v. 53, p. 1249–1262.

Clarence, J. F.: An account of the sugar industry of Java.—Chem. Abstr. 1916, v. 10, p. 1281 from Intern. Sugar J. 1916, v. 18, p. 80–82.

W. J. P. P.: A book review of a small volume by Felix Langen on the methods employed in the refining of sugar.—Chem. Weekblad, 1916, v. 13, p. 1229.

De Sornay, P.: Experiments in which sodium phosphate was used as a clarifier indicate that this salt may be used with advantage in the manufacture of white sugar.—J. Soc. Chem. Ind. 1916, v. 34, p. 916.

Haworth, Walter N., and Law, James: Researches to determine the structure of sucrose.—J. Chem. Soc. Lond. 1916, v. 109, p. 1314–1325.

Anon.: Observations on the action of the cyanides of the alkalies and of the alkaline earths on different varieties of sugar.—Südd. Apoth.-Ztg. 1916, v. 56, p. 8.

Maquenne, L.: Data showing the presence of reducing substances other than invert sugar in commercial sugars. These so-called secondary reducers are stated to be due to poor manufacture.—Compt. rend. Acad. sc. 1916, v. 162, p. 277–282.

Owe, W. L.: Some observations on the deterioration of sugars in storage. The article deals with the relation of moisture content and the presence of impurities to the growth of microörganisms.—Chem. Abstr. 1916, v. 10, p. 1281 from Louisiana Planter, 1916, v. 56, p. 173–174 and 188–190.

Rockey, D. W.: The technique of the α-naphthol test for sugar is described in detail, also illustrated.—Chem. Abstr. 1916, v. 10, p. 1605 from Sugar, 1916, v. 18, No. 2, p. 70–71.

Pellet, H.: A discussion of the causes of error in the determination of reducing sugar by the use of cupro-potassic solutions.—Ann. chim. anal. 1915, v. 20, p. 123–125.

Pellet, H.: Notes on Steuerwald's modification of the double polarization method for the estimation of sugar, with some general observations in inversion.—Chem. Abstr. 1916, v. 10, p. 1280.

Glaser, G.: A correction table for sugar chemists, together with various technical formulas.—Chem. Abstr. 1916, v. 10, p. 2159.

Gore, H. C.: A note on the occurrence of sucrose in American grapes.—J. Ind. & Eng. Chem. 1916, v. 8, p. 333.

Waterman, H. I.: Experimental data showing the influence of age and low temperature on the saccharose content of potatoes.—Chem. Weekblad, 1916, v. 13, p. 122–127.

Anon.: In a review of recent reports on the use of sugar as a dressing for wounds it is stated that Dr. G. Magnus, of Marburg, as a result of experiments made in the service of Prof. Koenig, recom-

mended sugar as a practical and inexpensive dressing for wounds.—J. Am. M. Assoc. 1916, v. 67, p. 825.

Simonds, J. P.: A report of experiments bearing on the usefulness of sugar in the treatment of wounds infected by *Bacillus perfringens*.—Compt. rend. soc. biol. 1916, v. 79, p. 906–908.

SACCHARUM LACTIS.

Dietrich, J. D.: U. S. Patent No. 1,201,027. A method for the preparation of lactose solution from whey.—Chem. Abstr. 1916, v. 10, p. 3135.

Wechselmann, W.: The bad results obtained with lactose in the test for kidney efficiency is due to the presence of microörganisms. If the sugar is rendered absolutely sterile, all after-reactions are eliminated.—Berlin, klin. Wchnschr. 1916, v. 53, p. 84–85.

SALVIA.

Chase, Benjamin F.: A consular report of the wild sage industry of the Adriatic.—Com. Rep. 1916, No. 99, p. 364–366.

SANGUINARIA.

Scoville, W. L.: The alkaloidal content of 10 lots of blood root examined varied from 1.77 to 7.01 per cent. Seven of the 10 samples contained 5 per cent or more.—J. Am. Pharm. Assoc. 1916, v. 5, p. 537.

Anon.: The alkaloidal content of 15 samples of sanguinaria assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

SANTALUM ALBUM, N. F.

Briggs, C. H.: Some notes on sandalwood, its assay, yield of oil, and changes in the oil during distillation.—J. Ind. & Eng. Chem, 1916, v. 8, p. 428–429.

SANTALUM RUBRUM.

Lilly, J. K.: Two lots of red saunders examined were low in color content and were probably partially extracted.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

SANTONINUM.

Holmes, E.M.: *Artemisia pauciflora* (Ledebour), Weber, is given as the source of this drug. This is differently quoted by Hanbury, who gives (Pharmacographia, II, p. 386) *A. maritima*, var. *A. pauciflora* (Weber), quod Ledebour, as a synonym of *Artemisia maritima*, var. *Stechmanniana*, which is the name given in the B. P.—Pharm. J. 1916, v. 97, p. 485.

Trendelenburg, Paul: The action of santonin and its derivatives upon the musculature of worms, and remarks on the action of oil of chenopodium.—Chem. Abstr. 1916, v. 10, p. 497 from Arch. exp. Path. Pharm. 1915, v. 79, p. 190–217.

SAPO.

Abraham, Joseph: A short historical review of soap manufacture.—J. Am. Pharm. Assoc. 1916, v. 5, p. 293–303.

Lecoq, Raoul: The manufacture of sodium and potassium soaps on an industrial scale. A descriptive review.—Bull. sc. pharmacol. 1916, v. 23, p. 225–246.

Wrisley, G. H.: Comments on the Krebitz process of soap making and glycerol recovery.—J. Ind. & Eng. Chem. 1916, v. 8, p. 732–733; see also Chem. Abstr. 1916, v. 10, p. 2411.

Bergo: In order to save fat in the manufacture of soap, the incorporation in the cake of such fat solvents as benzene, carbon tetrachloride or naphtha is recommended.—Chem. Abstr. 1916, v. 10, p. 978.

Stratton, S. W.: Specifications for soaps and methods for testing the same.—Circ. Bur. Stand. 1916, No. 62, p. 1–25.

Lenher, Victor, and Buell, Mary V. R.: A report of some studies on soap solutions.—J. Ind. & Eng. Chem. 1916, v. 8, p. 701–703.

Slack, H. F.: A discussion of the examination of the raw materials and finished products of soap manufacture.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 326–333.

Dickson, M. R.: Descriptions of practical laboratory methods for the analysis of soap. Hübl's method for the determination of rosin is recommended.—Chem. Abstr. 1916, v. 10, p. 2411.

Rosenberg, Louis, and Lenher, Victor: Descriptions of analytical methods for the examination of soap powders.—J. Ind. & Eng. Chem. 1916, v. 8, p. 716–719.

Newington, F. H.: A description of a method for the determination of free caustic alkali in soap. The method is based upon the principle of "salting out" the soap from its aqueous solution by means of sodium sulphate.—J. Soc. Chem. Ind. 1916, v. 35, p. 95–96.

Terry, P. B.: A description of a procedure for the determination of glycerol in soaps.—Chem. Analyst, 1916, v. 16, p. 13–23.

Slack, H. F.: A description of a new method for the determination of the fatty acids in soap.—Pharm. J. 1916, v. 41, p. 696.

Whitney, Mrs. D. V.: Some of the commercial soaps on the market labeled U. S. P. are not up to the standard of purity. A sample tested was not completely soluble in water and contained animal fats.—Proc. Missouri Pharm. Assoc. 1916, p. 29–30.

Scoville, Wilbur L.: The U. S. P. chemical tests for soap have been made more stringent for the purpose of excluding all but an olive oil soap. The restrictions on moisture content are expected to give more uniform results in the preparation of soap liniment and soap plaster.—Bull. Pharm., 1916, v. 30, p. 364.

Patch, E. L.: The samples of powdered soap examined were found to be well within the U. S. P. limits for moisture content as they contained only from 1 to 6 per cent. Two of the samples were only partially soluble in hot alcohol and solidified on cooling.—J. Am. Pharm. Assoc. 1916, v. 5, p. 544.

Shorter, S. A., and Ellingworth, S.: The emulsifying action of soap—a contribution to the theory of detergent action.—Proc. Roy. Soc. Lond. 1916, Sec. A, v. 92, p. 231–247; see also Perf. & Ess. Oil Rec. 1916, v. 7, p. 224–226.

Dickinson, G. K.: Notes on the antiseptic properties of soap.—Med. Rec. 1916, v. 89, p. 556–558.

SAPO MOLLIS.

Scoville, Wilbur L.: The cotton seed oil soap of the U. S. P. IX is a little firmer and not as easily soluble as linseed oil soap, but otherwise is very satisfactory.—Bull. Pharm. 1916, v. 30, p. 364.

SARSAPARILLA.

Wood, H. C., jr.: In a discussion of the pharmacologic action of sarsaparilla, it is stated that the therapeutic value of the latter depends on the saponins which it contains. Further, that these saponins have no effect on the system which is not common to all of this group of vegetable principles. By virtue of the nausea which they produce through their irritant action on the mucous membranes, they may increase the secretions of the bronchi and the skin and may therefore be of value in the treatment of acute bronchitis.—J. Am. M. Assoc. 1916, v. 66, p. 1070–1071.

Anon.: Comments on the doubtful virtues of sarsaparilla.—Pharm. J. 1916, v. 96, p. 297–298.

SASSAFRAS.

Koch, Felix J.: A short account of the gathering of sassafras in the vicinity of Cincinnati, Ohio.—Drug. Circ. 1916, v. 60, p. 751.

Anon.: A short note giving information relative to the production and collection of sassafras bark in America.—N. A. R. D. J. 1916, v. 21, p. 1056.

SCILLA.

Holmes, E. M.: *Urginea maritima* (Linné), Baker, is given as the botanical source. This name is used in Pharmacographia, although *Urginea Scilla*, Steinheil, the name adopted in the B. P., has the

priority, Linnæus having put it in the genus *Scilla*, which has triquetrous seeds, while those of *Urginea* are flat and discoid.—Pharm. J. 1916, v. 97, p. 485.

Schneider, Albert: Powdered squill can hardly be designated as "light yellow" in color, though it is light yellowish-brown.—Drug. Circ. 1916, v. 60, p. 693.

SCOPARIUS, N. F.

Sharp, Gordon: Notes on the introduction of scoparius in medicine and on its pharmacological and therapeutic actions.—Pharm. J. 1916, v. 96, p. 348.

Anon.: A reprint of the standards for broom top proposed by the committee on unofficial standards.—J. Am. Pharm. Assoc. 1916, v. 5, p. 89.

SCOPOLAMINÆ HYDROBROMIDUM.

Leyton, Albert and Helen: From experiments on the prevention of anaphylaxis in guinea pigs, it is concluded that dextro- and levoscopolamine are equally active on the central nervous system, but only the dextro form affects the peripheral organs.—Chem. & Drug. 1916, v. 88, p. 1172.

Joachimoglu, Georg: A comparison of the action of scopolamine and atropine on the cat eye. Scopolamine was found to be approximately tenfold as active as atropine.—Berlin. klin. Wchnschr. 1915, v. 52, p. 910; see also Chem. Abstr. 1916, v. 10, p. 783.

Editorial: The behavior of the uterus and other organs toward morphine and scopolamine. A review of several recent papers.—J. Am. M. Assoc. 1916, v. 66, p. 577, 578.

SCUTELLARIA, N. F.

Pilcher, Delzell, and Burman: A report of investigations to determine the action of skullcap on the excised uterus of the guinea pig.—J. Am. M. Assoc. 1916, v. 67, p. 490–492.

SENECIO, N. F.

Pilcher, Delzell, and Burman: A report of investigations to determine the action of life root on the excised uterus of the guinea pig.—J. Am. M. Assoc. 1916, v. 67, p. 490–492.

SENNA.

Schneider, Albert: In the U. S. P. description of the sennas, the diagnostic size and form of the neighboring cells is not mentioned.—Drug. Circ. 1916, v. 60, p. 693.

Ruedinger, H.: A description of a method for obtaining senna leaves free from resin.—Boll. chim.-farm. 1916, v. 55, p. 40; see also Chem. Abstr. 1916, v. 10, p. 1907.

Congdon, Leon A.: Two lots of senna examined were rejected for not complying with the U. S. P. requirements.—Bull. Kansas Bd. Health, 1916, v. 12, p. 7.

Lilly, J. K.: One lot of senna examined contained sand and stones up to 9 per cent.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

SERUM ANTIDIPHTHERICUM.

Heinemann, P. G.: Report of the committee of the laboratory section of the American Public Health Association on standard methods for preparing diphtheria antitoxin.—Am. J. Public Health, 1916, v. 6, p. 751, 752.

Zingher, Abraham: A description of a modification of Roemer's method for the determination of small amounts of diphtheria antitoxin in blood sera.—J. Infec. Dis. 1916, v. 19, p. 556–564.

Busson, Bruno, and Löwenstein, Ernst: A report of experimental studies on the immunity conferred by diphtheria toxin-antitoxin mixtures.—Chem. Abstr. 1916, v. 10, p. 217.

SERUM ANTITETANICUM PURIFICATUM.

Wintz, M.: A report of investigations concerning the antitoxin content of the serum of tetanus patients. The amount was found to be too small to permit of its being used therapeutically.—Chem. Abstr. 1916, v. 10, p. 1053 from Münch. med. Wchnschr. 1915, v. 62, p. 1633–1635.

Löwy, O.: Studies on tetanus immunity in man. Only a few tetanus convalescents showed the presence of specific immune bodies. In other cases the immune bodies are either not present or are eliminated rapidly.—Chem. Abstr. 1916, v. 10, p. 2109 from Wien. klin. Wchnschr. 1915, v. 28, p. 1288–1290.

SINAPIS ALBA.

Holmes, E. M.: White mustard is referred to *Sinapis alba*, Linné, but *Sinapis nigra* to *Brassica nigra* (Linné), Koch, although Druce has pointed out (Yearbook of Pharmacy, 1898, p. 462) that *Brassica sinapioides*, Roth, is an earlier name. Why the *Sinapis alba* should not be referred to the genus *Brassica*, as is now usual, is not evident.—Pharm. J. 1916, v. 97, p. 485.

Penau: A description of a method for the assay of mustard seed. An abstract.—C. U. C. P. Alumni J. 1916, v. 23, p. 169.

van Leersum, E. C.: An explanation of the laxative action of white mustard seed. The hydrogen sulphide formed from the seed

is stated to be the laxative principle.—J. Pharmacol. & Exper. Therap. 1916, v. 8, p. 285–296; see also Chem. Abstr. 1916, v. 10, p. 2003.

Lybing, J.: A note on the adulteration of mustard seed with the seeds of *Brassica juncea*.—Svensk farm. Tidskr. 1916, v. 20, p. 79–81.

Rusby, H. H.: All mustard imported has undergone a very remarkable improvement as to cleanliness and freedom from weed seeds.—J. Am. Pharm. Assoc. 1916, v. 5, p. 541.

Frary, Guy G.: Of 23 samples of ground mustard examined, one contained added wheat flour and another contained starch and tumeric.—Rep. South Dakota F. & D. Com. 1916, No. 16, p. 131–132.

SINAPIS NIGRA.

Schneider, Albert: Ground black mustard is never "greenish brown" in color as described in the U. S. P. IX.—Drug. Circ. 1916, v. 60, p. 693.

SODA CUM CALCE, N. F.

Guareschi, I.: A literary review in which the history, chemistry, and uses of soda lime are discussed in detail.—Chem. Abstr. 1916, v. 10, p. 25.

Kelley, G. L.: A description, illustrated with a diagram, of an improved soda-lime tube for use in the determination of carbon dioxide.—J. Ind. & Eng. Chem. 1916, v. 8, p. 1038–1039.

SODII ACETAS.

Gnesotto, T., and Fabris, C.: A presentation and discussion of data pertaining to the thermal constants of hydrated sodium acetate.—Chem. Abstr. 1916, v. 10, p. 1128.

SODII ARSENAS.

Smith, G. E.: A study of the factors controlling the reactions of disodium arsenate with lead nitrate and lead acetate.—J. Am. Chem. Soc. 1916, v. 38, p. 2014–2027.

SODII BENZOAS.

Lewis, H. B., and Carr, W. B.: A report of researches to determine the influence of sodium benzoate on uric acid elimination.—J. Biol. Chem. 1916, v. 25, p. 13–20.

SODII BICARBONAS.

Astruc, A., and Cambe, J.: Experimental data showing the interaction of sodium bicarbonate with certain salts, especially bismuth salicylate.—J. pharm. et chim. 1916, v. 14, p. 353–356.

Rogers, Leonard: A report of studies to determine the value of injections of sodium bicarbonate in the prevention of uremia.—Chem. Abstr. 1916, v. 10, p. 2112.

SODII BORAS.

Lythgoe, Hermann C.: Of two samples of borax examined, one was found to be adulterated.—Rep. Massachusetts Bd. Health, 1916, p. 450.

SODII BROMIDUM.

Beringer, George M.: The purity of sodium bromide has been increased from 97 per cent absolute bromide in the Eighth Revision to 98.5 per cent in the Ninth Revision.—Am. Druggist, 1916, v. 64, No. 8, p. 23.

SODII CACODYLAS.

Cole, H. N.: A discussion of the value of sodium cacodylate in the treatment of syphilis. The author agrees with Nichols and others in that he states it is of no value.—J. Am. M. Assoc., 1916, v. 67, p. 2012–2013; Rep. Therap. Res. Com., 1916, v. 5, p. 200–204.

Neiman, L. A.: Notes on the intravenous use of sodium cacodylate in the treatment of syphilis.—Am. J. Clin. Med., 1916, v. 23, p. 407–408.

Anon.: Venarsen, prepared by the Intravenous Products Co., is a simple solution containing sodium cacodylate with mercuric iodide and sodium iodide.—J. Am. M. Assoc., 1916, v. 66, p. 978.

SODII CARBONAS MONOHYDRATUS.

Beringer, George M.: On account of the high price of potassium salts, due to the war, the U. S. P. IX directs that sodium carbonate may be substituted for potassium carbonate in the solution of magnesium citrate, rhubarb preparations, etc.—Am. Druggist, 1916, v. 64, No. 8, p. 24.

Clark, A. H.: A presentation of data on the keeping qualities of sodium sulphite and sodium carbonate.—Drug. Circ. 1916, v. 60, p. 396.

Colson, A.: Notes on contradictions between calculated and observed solubilities of certain sodium salts. The discordance found for sodium carbonate is not explained.—Chem. Abstr., 1916, v. 10, p. 711.

Jönecke, Ernst: A report on the determination of the melting points of monohydrated sodium carbonate and other salts by means of an electrically heated pressure apparatus.—Chem. Abstr., 1916, v. 10, p. 143.

SODII CHLORIDUM.

Lohman, Clifford: A description of a method for preparing pure sodium chloride. The potassium is removed by means of platinic chloride.—Chem. News, 1916, v. 114, p. 53.

Caldwell, H. V.: Laboratory control in salt refining. The article includes a description of the methods of testing for impurities.—Am. Food J., 1916, v. 11, p. 621–622.

Rabe, Rudolph F.: A report on the physiological action of sodium chloride administered in physiological doses.—J. Am. Inst. Homoeop., 1916, v. 8, p. 1013–1015.

Shearer, Creswell: Experimental data showing the toxic action of dilute, pure sodium chloride solutions on the meningococcus.—Proc. Roy. Soc., Lond., 1916, Sec. B, v. 89, p. 440–443.

Ostrovsky, S. E.: The elimination of sodium chloride in scarlet fever. Weiss's method for the quantitative determination of sodium chloride in the urine was found to be accurate.. An abstract.—J. Am. M. Assoc., 1916, v. 66, p. 1666.

SODII CITRAS.

Salant, W., and Wise, L. E.: An investigation of the pharmacological action of sodium citrate.—J. Biol. Chem. 1916, v. 28, p. 27.

Satterlee and Hooker: As anticoagulants for use in the transfusion of blood, sodium citrate and metaphosphate are the only substances exhibiting desirable characteristics. Both of these salts, however, have toxic properties which demand consideration of the quantities that can be safely employed for the purpose of transfusion.—J. Am. M. Assoc. 1916, v. 66, p. 618–624.

Garbat, A. L.: The sodium citrate method of transfusion is not to be considered in any way dangerous because of the sodium citrate employed. A 0.25 per cent solution of the salt has been found to be satisfactory for preventing coagulation.—J. Am. M. Assoc. 1916, v. 66, p. 1543.

SODII GLYCEROPHOSPHAS.

Anon.: In a review of the U. S. P. IX regret is expressed for the admission of calcium and sodium glycerophosphates, as their therapeutic efficiency is in doubt at the present time.—J. Am. M. Assoc. 1916, v. 67, p. 764.

Hegland, J. M. A.: A cheap method of preparing sodium glycerophospate is stated to consist of evaporating to dryness a mixture of 446 parts of $Na_4P_2O_7$ and 776 parts of 25 per cent H_3PO_4, and then heating this residue at 190° C. with anhydrous glycerin.—Pharm. Weekblad, 1916, v. 53, p. 1645–1648.

Anon.: A review of the work which has been done to determine the structure of sodium glycerophosphate.—Pract. Drug. 1916, No. 7, p. 39.

Bailly, O.: An explanation of the mechanism of the reaction between tribasic sodium phosphate and the α-chlor substitution product of glycerin.—J. pharm. et chim. 1916, v. 13, p. 155–159.

Keulemans, N.: A note on the preparation of a 50 per cent solution of sodium glycerophosphate.—Pharm. Weekblad, 1916, v. 53, p. 259–260.

SODII HYDROXIDUM.

Rather, J. B.: A report on methods for testing sodium hydroxide.—J. Assoc. Off. Agric. Chem. 1916, v. 2, p. 38–41.

E'we, G. E.: Some of the sodium hydrate examined was strictly U. S. P. in quality, but was labeled "crude" and was in a granular powder.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 117.

Baxter, Gregory P., and Starkweather, Howard W.: A report of investigations to determine the efficiency of calcium chloride, sodium hydroxide, and potassium hydroxide as drying agents.—J. Am. Chem. Soc. 1916, v. 38, p. 2038–2041.

SODII HYPOPHOSPHIS.

Marriott, W. M.: From experimental data, the author concludes that there is no reliable evidence to show that the hypophosphites exert any physiological effect or that they act as foods.—J. Am. M. Assoc. 1916, v. 66, p. 486–488; Rep. Therap. Res. Com. 1916, v. 5, p. 103–111.

SODII IODIDUM.

de Matta, A. A.: A discussion of sodium iodide from a pharmaceutical and medical standpoint. Descriptions of tests for identity and purity are included. An abstract.—J. Am. M. Assoc. 1916, v. 67, p. 1337.

Vanderkleed, C. E.: One lot of sodium iodide examined assayed but 95.2 per cent of NaI, the low assay being due to moisture.—J. Am. Pharm. Assoc. 1916, v. 5, p. 544.

Güntelberg, E.: A report of thermodynamical experiments to determine the affinity in the reaction $KClO_3+NaI=KI+NaClO_3$.—Chem. Abstr. 1916, v. 10, p. 1463.

SODII NITRAS.

Anon.: A book review calls attention to a volume by A. Hartwig entitled *Die Salpeterindustrie Chiles und ihre weltwirtschaftliche Bedeutung.*—Chem. Abstr. 1916, v. 10, p. 373.

Taylor, Guy B., and Cope, W. C.: Data relating to the hygroscopic properties of the nitrates of sodium, potassium, and ammonium.—Chem. Abstr. 1916, v. 10, p. 2799 from Met. Chem. Eng. 1916, v. 15, p. 140–143.

SODII PERBORAS.

Liebknecht, O.: U. S. Patent No. 1,200,739. A method for the preparation of a stable sodium perborate is described.—Chem. Abstr. 1916, v. 10, p. 3142.

Berthelot, Albert: A note on the dangers of using impure sodium perborate in medicine and surgery. Special mention is made of the effect of the presence of carbonate.—Répert. pharm. 1916, v. 28, part 1, p. 232–233.

SODII PHOSPHAS.

Street, John Phillips: Eleven samples of sodium phosphate were examined. While all samples showed a fair degree of purity, partial efflorescence of the salt was noted in some cases.—Rep. Connecticut Agric. Exper. Sta. 1916, part 4, p. 256.

SODII PHOSPHAS EFFERVESCENS.

Street, John Phillips: All of the three samples of effervescent sodium phosphate examined showed a deficiency in carbonate probably due to decomposition as a result of exposure to damp air.—Rep. Connecticut Agric. Exper. Sta. 1916, part 4, p. 257.

SODII SALICYLAS.

Lami, P.: A description of a laboratory method for preparing sodium salicylate from sodium carbonate.—Boll. chim.-farm. 1916, v. 55, p. 195.

Terry, R. W.: A sample of sodium salicylate contained an excess of moisture. As the salt is very hygroscopic, the high moisture content was probably due to the fact that the bottle had been opened previous to analysis.—Proc. Ohio Pharm. Assoc. 1916, p. 59.

Vanderkleed, C. E.: Two samples of sodium salicylate examined assayed 97.2 and 98.4 per cent instead of the U. S. P. 99.5.—J. Am. Pharm. Assoc. 1916, v. 5, p. 544.

Hill, J. Rutherford: A discussion of the incompatibilities resulting from the prescribing of iodine and sodium salicylate in the same mixture.—Pharm. J. 1916, v. 96, p. 397.

Editorial: In a review of an article by Blankenhorn, sodium salicylate is stated to be a valuable drug. It is official and cheap and is quite equal to the substitutes that have been offered for it from time to time.—J. Am. M. Assoc. 1916, v. 66, p. 362.

Scott, R. W., and Hanzlik, P. J.: Researches on the physiologic effects of the salicylates. When given in full therapeutic doses they produce albuminuria.—J. Am. M. Assoc. 1916, v. 67, p. 1838–1841; Rep. Therap. Res. Com. 1916, v. 5, p. 185–199.

SODII SULPHAS.

Carles, P.: A description of a method for detecting the presence of arsenic in sodium sulphate.—J. pharm. et chim. 1916, v. 13, pp. 219–221: see also Répert. pharm. 1916, v. 28, part 1, p. 148; Ann. chim. analyt. 1916, v. 21, p. 116–117; Farm. Espan. 1916, v. 48, p. 328.

Kohn-Abrest, E.: An explanation of the reaction which takes place between oxalic acid and $Na_2SO_4.10H_2O$.—Ann. Falsif. 1916, v. 9, p. 68–69; see also Soc. Chem. Ind. 1916, v. 35, p. 597.

Arnold, W. J.: Comments on the use of sodium sulphate in dysentery and infantile diarrhea.—Brit. M. J. 1916, v. 1, p. 49.

Anon.: A discussion of the value of sodium sulphate as an antidote for phenol (carbolic acid) poisoning.—J. Am. M. Assoc. 1916, v. 67, p. 535.

SODII SULPHIS EXSICCATUS.

Clark, A. H.: A presentation of data on the keeping qualities of sodium sulphite and sodium carbonate.—Drug. Circ. 1916, v. 60, p. 396.

SODII THIOSULPHATE.

Sander, A.: A discussion of a modification of Bodnar's method for the determination of thiosulphate in the presence of sulphite.—Ztschr. anal. Chem. 1916, v. 55, p. 349.

SPARTEINÆ SULPHAS.

Zeigler, W. H.: From a study of the pharmacological action of spartine sulphate, it is concluded that this alkaloidal salt is not a cardiac stimulant, but a depressant to both the heart and the respiration.—Southern M. J. 1916, v. 9, p. 671–676.

SPIGELIA.

Roberts, J. G.: One lot of spigelia examined contained a few foreign roots, but was considered of normal quality.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 117.

SPIRITUS.

Dickman, George C.: The number of spirits in the U. S. P. has been reduced from 20 to 15, and a further reduction in number might very properly have been made.—Pract. Drug. 1916, v. 34, No. 10, p. 25.

SPIRITUS AETHERIS COMPOSITUS, N. F.

Diekman, George C.: The deletion of compound spirit of ether is justified on the grounds that it is difficult or even impossible to obtain ethereal oil of uniform quality.—Pract. Drug. 1916, v. 34, No. 10, p. 25.

SPIRITUS AETHERIS NITROSI.

Diekman, George C.: It is difficult to conceive why a working formula for the preparation of spirit of nitrous ether is retained in the Pharmacopœia, as pharmacists, with very few exceptions, do not manufacture this article. At the very best it is a difficult process to follow, and the product obtained in most cases will not meet the requirements.—Pract. Drug, 1916, v. 34, No. 10, p. 25.

Kebler, L. F., Palkin, S., and Ewing, C. O.: A presentation of experimental data obtained in investigations to determine the stability of the spirit of nitrous ether.—J. Am. Pharm. Assoc. 1916, v. 5, p. 514–516.

Bachman, Gustav, and Turner, D. D.: Analytical data showing the rate of decomposition of spirit of nitrous ether when stored under different conditions.—Proc. Minnesota Pharm. Assoc. 1916, p. 136–139; see also D. D. Turner, p. 139–141.

Engelhardt, H., and Winters, O. E.: Experimental data are presented showing the superiority of the Dietze potassium chloride method, as adopted by the Dutch pharmacopœia, over the U. S. P. method for the assay of the spirit of nitrous ether.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1327–1329.

Turner, D. D.: A table showing the quality of 14 samples of spirit of nitrous ether collected during a trip throughout the northwest portion of the United States.—Drug. Circ. 1916, v. 60, p. 268.

Table showing some of the analytical results reported for spirit of nitrous ether.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Anon	59	50	Proc. Maryland Pharm. Assoc. 1916, p. 84-91.
Do	9	7	Proc. Minnesota Pharm. Assoc. 1916, p. 211.
Do	53	37	Bull. Vermont Bd. Health, 1916, v. 17, No. 2.
Do	3	3	Rep. Wyoming D. F. & O. Com. 1916, v. 2, No. 7, p. 33, 34.
Congdon, Leon A	6	4	Rep. Kansas Bd. Health, 1916, p. 54, 133.
Frary, Guy G	20	14	Rep. South Dakota F. & D. Com. 1916, No. 16, p. 148.
Hostmann, Jeannot	10	4	Proc. New Jersey Pharm. Assoc. 1916, p. 77.
Lea, E. J	3	3	Bull. California Bd. Health, 1916, v. 11, p. 648.
Lythgoe, Hermann C	110	56	Rep. Massachusetts Bd. Health, 1916, p. 450.
McGill, A	85	81	Bull. Lab. Inl. Rev. Dept. Canada, 1916, No. 39, p. 4.
Sayre, L. E	1	1	Bull. Kansas Bd. Health, 1916, p. 9.
Todd, A. R	12	8	Bull. Michigan D. & F. Dept. 1916, Nos. 211-247, p. 20; Nos. 250-251, p. 16; Nos. 252-255, p. 19.

SPIRITUS AMMONIÆ.

Dickman, George C.: The spirit of ammonia was used so little and varied so much in ammonia content, even when carefully kept, that its deletion must be considered justifiable.—Pract. Drug. 1916, v. 34, No. 10, p. 25.

SPIRITUS AMMONIÆ AROMATICUS.

Editorial: Aromatic spirit of ammonia is an old-fashioned complex mixture: its reputation has little scientific basis. Whatever effect it may have is probably psychic, to a considerable degree at least. Such effect might be expected from the irritation of the nasal mucosa by the ammonia and the flavor and odor of the lemon, lavender and nutmeg oils. The physical effect, if any, is probably due to the alcohol, though the ammonium carbonate and combined ammonia may have some restorative action by their irritation of the gastric mucosa or by their neutralization of nauseating acids in the stomach.—J. Am. M. Assoc. 1916, v. 67, p. 65.

Wood, Horatio C.: Any stimulating effect which may be observed after the oral administration of aromatic spirits of ammonia is due either to a psychic effect or to its local irritant action on the gastric mucosa, just as the irritation of the mucous membrane of the nose by ammonium carbonate, in the form of smelling salts, may reflexly excite the medulla. If the stimulant action of ammonium carbonate administered by the mouth is due to its local irritant effect on the mucous membrane of the stomach, it is evidently a matter of minor importance whether the irritant is alcoholic or ammoniacal or a combination.—J. Am. M. Assoc., 1916, v. 67, p. 231.

Lanski, J.: Aromatic spirits of ammonia is not devoid of usefulness. A whiff of it, by virtue of its physical properties, resuscitates the depressed patient for a moment, at least, which is more than we get from digitalis or strychnine. The manner and intensity of this resuscitation may be of service in giving us an insight into the nature and extent of the depression. It is therefore deserving of a place even in a restricted pharmacopœia, not as a life-saver but as a useful agent.—J. Am. M. Assoc. 1916, v. 67, p. 828.

Congdon, Leon A.: Of four samples of aromatic spirits of ammonia examined, three were rejected.—Rep. Kansas Bd. Health, 1916, p. 133.

Lea, E. J.: Four samples of aromatic spirits of ammonia examined were below the standard.—Bull. California Bd. Health, 1916, v. 11, p. 648.

Vanderkleed, C. E.: Some of the samples of aromatic spirit of ammonia examined were deficient in carbonate and in ammonia water. One lot which contained three times too much ammonia was evidently prepared from stronger ammonia water instead of ammonia water.—J. Am. Pharm. Assoc. 1916, v. 5, p. 544.

SPIRITUS ANISI.

Lythgoe, Hermann C.: Of 45 samples of spirit of anise examined, 15 were adulterated.—Rep. Massachusetts Bd. Health, 1916, p. 450.

SPIRITUS CAMPHORÆ.

Scoville, Wilbur L.: The fact that artificial camphor is optically inactive prevents its being used in the preparation of the spirit, which is assayed by a polarimetric method.—Bull, Pharm. 1916, v. 30, p. 362.

Beringer, George M.: For the determination of camphor in the spirit of camphor, the U. S. P. now specifies the polariscope method. As very few pharmaceutical laboratories have this expensive apparatus, it is thought that this test is more academic than practicable, and that its observance will be largely confined to State laboratories.—Am. Druggist, 1916, v. 64, No. 8, p. 24.

Kollo, Constantin: A method for the quantitative determination of camphor in spirit of camphor consists of precipitating the camphor with lead acetate, dissolving the precipitate in a weighed amount of ether, and calculating the quantity of camphor from the increase in weight of the ether solution.—Chem. Zentralbl, 1916, v. 87, part 2, p. 112.

Rustung, G.: An account of experimental researches on the quantitative estimation of camphor in spirit of camphor.—Norges Apotek. Tidsskr. 1916, v. 24, p. 17–22; see also C. Ylstrup Dahle, p. 125–127.

Anon.: A description of a method for the determination of the camphor content of the spirit.—Apothecary, 1916, v. 13, No. 2, p. 36.

Krauss, Ludwig: A table showing the results obtained in the quantitative estimation of camphor in a large number of druggists' samples of spirit of camphor. The difference in the behavior of natural and synthetic camphor toward Hübl's solution is pointed out.—Südd. Apoth.-Ztg. 1916, v. 56, p. 248–249.

Table showing some of the analytical results reported for spirit of camphor.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Anon.	44	6	Rep. Connecticut D. & F. Com. 1916, p. 19.
Do.	40	8	Bull. Vermont Bd. Health, 1916, v. 16, No. 3; v. 17, No. 2.
Do.	1	1	Rep. Wyoming D. F. & O. Com. 1916, v. 2, No. 7, p. 33.
Barnard, H. E.	15	1	Bull. Indiana Bd. Health, 1916, v. 19, p. 63 and 76.
Congdon, Leon A.	7	3	Rep. Kansas Bd. Health, 1916, p. 135.
Frary, Guy G.	64	23	Rep. South Dakota F. & D. Com. 1916, No. 16, p. 140-141.
Hostmann, Jeannot	15	2	Proc. New Jersey Pharm. Assoc. 1916, p. 77.
Lythgoe, Hermann C.	135	25	Rep. Massachusetts Bd. Health, 1916, p. 450.
McGill, A.	168	42	Bull. Lab. Inl. Rev. Dept. Canada, 1916, No. 344, p. 4.
Stinson, Ray	123	18	Proc. North Dakota Pharm. Assoc. 1916, p. 111.
Todd, A. R.	30	9	Bull. Michigan D. & F. Dept. 1916, No. 244-247, p. 20; No. 248-249, p. 10; No. 252-255, p. 19.

SPIRITUS FRUMENTI.

Anon.: The National Association of Retail Druggists at their last convention passed a resolution favoring an official standard for whisky and brandy in order that inferior articles for medicinal purposes may be avoided.—N. A. R. D. J. 1916, v. 22, p. 1351.

Beringer, George M.: A detailed discussion of the pharmacopœial standards for whisky and brandy.—J. Am. Pharm. Assoc. 1916, v. 5, p. 54–65.

Doerschuk, A. N.: A discussion of the wisdom of deleting whisky and brandy from the U. S. P.—Proc. Missouri Pharm. Assoc. 1916, p. 92–95.

Beringer, George M.: An abstract of the report of the referee on whisky and brandy.—Pharm. Era, 1916, v. 49, p. 59–62.

SPIRITUS GAULTHERIA.

Anon.: Of 21 samples of spirit of gaultheria examined, 1 was rejected for being of poor quality.—Off. Insp. Maine Agric. Exper. Sta. 1916, app. p. 28.

Anon.: Of 18 samples of essence of wintergreen examined, 1 was adulterated.—Bull. Vermont Bd. Health, 1916, v. 17, No. 2.

Lythgoe, Hermann C.: Of nine samples of spirit of wintergreen examined, one was adulterated.—Rep. Massachusetts Bd. Health, 1916, p. 450.

SPIRITUS LIMONIS, N. F.

Redfern, E. L.: Notes on the analysis of nonalcoholic lemon and orange extracts.—J. Ind. & Eng. Chem. 1916, v. 8, p. 421.

Anon.: Six samples of spirit of lemon examined were found to be genuine.—Rep. Massachusetts Bd. Health, 1916, p. 450.

SPIRITUS MENTHAE PIPERITÆ.

Thompson, H. L.: A description of methods for the determination of menthyl acetate and total menthol in the spirit of peppermint. Data obtained in the analysis of a number of samples of spirit by the author's methods are presented in the form of tables.—Am. J. Pharm. 1916, v. 88, p. 303–308.

Table showing some of the analytical results reported for spirit of peppermint.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Anon.	31	5	Off. Insp. Maine Agric. Exper. Sta. 1916, app. p. 24–25.
Do.	40	16	Bull. Vermont Bd. Health, 1916, No. 3, v. 17, No. 2.
Congdon, Leon A.	4	2	Rep. Kansas Bd. Health, 1916, p. 133.
Frary, Guy G.	42	7	Rep. South Dakota F. & D. Com. 1916, No. 16, p. 149.
Hostmann, Jeannot	10	4	Proc. New Jersey Pharm. Assoc. 1916, p. 78.
Lythgoe, Hermann C.	194	42	Rep. Massachusetts Bd. Health, 1916, p. 450.
Tice, William G.	35	13	Rep. New Jersey Dept. Health, 1916, p. 72.
Todd, A. R.	11	4	Bull. Michigan D. & F. Dept. 1916, Nos. 244–247, p. 20; Nos. 248–249, p. 10, Nos. 252–255, p. 19.

SPIRITUS MYRCIÆ COMPOSITUS, N. F.

Anon.: The change in title from "Spiritus Myrciæ" to "Spiritus Myrciæ Compositus" is commendable. The deletion of the synonym "bay rum" is a mistake, because barbers and barber's supply houses can now sell anything they desire as bay rum.—N. A. R. D. J. 1916, v. 22, p. 939.

Tice, William G.: Of 98 samples of spirit of myrcia examined, 18 were below standard.—Rep. New Jersey Dept. Health, 1916, p. 72.

SPIRITUS VINI GALLICI.

Beringer, George M.: A detailed discussion of the pharmacopœial standards for whisky and brandy.—J. Am. Pharm. Assoc. 1916, v. 5, p. 54–65. Additional references are given under Spiritus Frumenti.

STAPHISAGRIA.

Anon.: In a discussion of the use of delphinium as a remedy for pediculosis, formulas for making a variety of larkspur preparations are given.—J. Am. M. Assoc. 1916, v. 66, p. 913.

STRAMONIUM.

Rusby, H. H.: Stramonium is now made to include *Datura Tatula*, on the ground that the latter contains an equal amount of alkaloid, the question of the identity and properties of such alkaloid being disregarded.—Drug. Circ. 1916, v. 60, p. 537.

Holmes, E. M.: Under the name stramonium, *Datura Tatula* is official, as well as *Datura Stramonium*.—Pharm. J. 1916, v. 97, p. 485.

Brill, Harvey C.: Analytical data showing the alkaloidal content of the various organs of *Datura alba*.—Philippine J. Sc. 1916, v. 11, sec. A, p. 257–260.

Sivolobov: Researches on the volatile odoriferous constituents of *Datura Stramonium*. Methyl and ethyl alcohols, together with small portions of aldehydes, ketones, and esters, were identified. The aldehydes comprise acetaldehyde and probably formaldehyde, propaldehyde, isobutylaldehyde, and another aldehyde of considerably higher boiling point. Acetone and another ketone of higher boiling point were found and esters of acetic and formic acids.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 51 from Journ. Russ. Phys. Chem. Soc. 1915, v. 47, p. 1561.

Anon.: Data showing the alkaloidal content of South African stramonium leaves as compared with those from Europe, India, and Egypt. The analyses were made at the Imperial Institute.—Chem. & Drug. 1916, v. 88, p. 868.

Anon.: Attention is called to the recurrence of the use of *Xanthium strumarium* as an adulterant for stramonium.—Pharm. J. 1916, v. 43, p. 404.

Anon.: Of 18 samples of stramonium leaves assayed, the mydriatic alkaloidal content of 11 was above standard and 7 below.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 119.

Roberts, J. G.: Of 22 lots of stramonium leaves assayed, only 2 lots, containing 0.22 and 0.23 per cent respectively, of alkaloids were not U. S. P. In the other 20 lots 0.25 to 0.48 per cent of alkaloids were found.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 117.

Swift, E. G.: Five lots of stramonium leaves examined contained from 0.27 to 0.57 per cent of alkaloids.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

STRONTII CARBONAS, N. F.

De Coninck, W. Ö.: A discussion of some reactions of the carbonates of calcium, strontium, barium, zinc, and manganese.—Ann. chim. analyt. 1916, v. 21, p. 131–133.

STRONTII SALICYLAS.

Blankenhorn, M. A.: From experiment, it is concluded that strontium salicylate possesses no advantage over other salicylates as a therapeutic agent.—Rep. Therap. Res. Com. 1916, v. 5, p. 76–80; J. Am. M. Assoc. 1916, v. 66, p. 331–333.

E'we, G. E.: Two lots of strontium salicylate examined showed cloudiness in the U. S. P. test for barium but were otherwise U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 117.

STROPHANTHINUM.

Rowe, L. W.: Observations on the variability in the activity of strophanthin, with particular reference to ouabain.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1183–1187.

Klein, Karel: A discussion of experiments relative to the cumulative action of strophanthin.—Chem. Abstr. 1916, v. 10, p. 937.

STROPHANTHUS.

Rusby, H. H.: Strophanthus is at present so defined as to permit the use of either *Strophanthus Kombe* or *Strophanthus hispidus*, a procedure which is, to say the least, rash in view of our present knowledge.—Drug. Circ. 1916, v. 60, p. 537.

Holmes, E. M.: *Stropanthus hispidus* is now recognized as official, as well as *S. Kombe*. This is a distinct advantage, as *S. hispidus* is not likely to be mixed with other species; and although the similar

seed of *S. Arnoldianus* might be substituted for it, the colour test readily distinguishes them.—Pharm. J. 1916, v. 97, p. 485.

Sharp, Gordon: Historical notes on the chemistry, pharmacology, and therapeutics of strophanthus.—Pharm. J. 1916, v. 96, p. 317–318.

Hatcher, Robert: A presentation of experimental data showing that the oil of strophanthus is not the constituent of strophanthus seed which produces emesis.—J. Am. Pharm. Assoc. 1916, v. 5, p. 157–162.

Clampett, G. W.: Of three samples of strophanthus leaves examined, the strophantin content ranged from 1.4 to 6.5 per cent.—Proc. Texas Pharm. Assoc. 1916, p. 80.

Lantier: On the treatment of cardiac affections with "l'intrait de strophanthus"—a powdered extract of the drug.—Bull. sc. pharmacol. 1916, v. 23, p. 36–46.

STRYCHNINA.

Patch, E. L.: One sample of strychnine alkaloid examined was dark in color and contained an excess of brucine.—J. Am. Pharm. Assoc. 1916, v. 5, p. 544.

Chase, C. S., and Schlomovitz, E. H.: A discussion of the so-called stimulating action of strychnine. The designation of strychnine as a stimulant is cited as an example of the dangerous misuse of words.—J. Iowa Med. Soc. 1916, v. 6, p. 215–219.

Smith, Maurice I.: A study of the action of strychnine in certain types of cardiac irregularities.—J. Pharmacol. & Exper. Therap. 1916, v. 9, p. 365–399.

Hatcher, R. A., and Smith, M. I.: Researches on the elimination of strychnine by the kidneys.—J. Pharmacol. & Exper. Therap. 1916, v. 9, p. 27–41.

Anon.: California quail have been found to be comparatively immune to the action of strychnine, whereas ground squirrels are particularly susceptible.—Chem. & Drug. 1916, v. 88, p. 458.

STRYCHNINAE NITRAS.

Fillippi, Eduardo: An investigation of the chemical and physiological properties of strychnine nitrate in a solution containing an excess of a quinine salt. Both the chemical and physiological actions are obscured.—Arch. farmacol. sper. 1916, v. 22, p. 120–130 through Chem. Abstr. 1916, v. 10, p. 2781.

STYRAX.

Henge, M.: Researches on styrax. I. The detection of coniferous resin acids (abietic and pimaric acids).—Ber. deutsch. chem. Gesellsch., 1916, v. 49, p. 1622–1632; see also J. Soc. Chem. Ind. 1916, v. 49, p. 1622.

Kafuku, K.: Researches on the constituents of the volatile oil of liquidambar of Formosa. The oil consists chiefly of terpenes, among which are camphene, α-pinene, dipentene, and probably phellandrene and nopinene. It also contains traces of aldehydes or ketones partially unrecoverable from bisulphite compounds.—J. Chem. Ind. Japan. 1916, v. 19, p. 516 through Chem. Abstr. 1916, v. 10, p. 2386–2387.

SULPHUR SUBLIMATUM.

Lamoreaux, W. F.: U. S. Patent No. 1,169,726. A method of extracting sulphur from sulphur oxides by the use of carbon is described.—Chem. Abstr. 1916, v. 10, p. 957.

Gaubert, Paul: A description of a new crystalline form of sulphur characterized as spherolites in helicoidal spirals.—Compt. rend. acad. sc. 1916, v. 162, p. 554–556.

Wolf, R. B.: In discussing chemical testing in sulphite pulp work, the analysis of sulphur is considered.—Chem. Abstr. 1916, v. 10, p. 2403.

Belatti, M., and Finazzi, L.: Data concerning the heat of solution of sulphur in carbon disulphide are presented. The values were found to vary from −11.89 to −11.55 calories.—Chem. Abstr. 1916, v. 10, p. 1126.

Fonzes-Diacon: A discussion of the methods of adulterating sulphur and the means for detecting the same.—Ann. Falsif. 1916, v. 9, p. 333–339.

Smith, W.: A description of a method for the estimation of selenium in sulphur.—Chem. News, 1916, v. 114, p. 44–45.

Paul, L.: Experimental data relative to the incorporation of sulphur in vaseline at different temperatures are given.—Chem. Abstr. 1916, v. 10, p. 251.

Anon.: A review of a book by G. Martin entitled *Sulphuric Acid and Sulphur Products*.—Nature, 1916, v. 97, p. 118.

Neumaijer: A report of poisoning in a soldier who rubbed his body with sulphur for the removal of lice.—Pharm. Weekblad, 1916, v. 53, p. 38.

SUMBUL.

Heyl, Frederick W., and Hart, Merrill C.: A report of researches to determine the constituents of sumbul root. Sucrose, levulose, betaine, an acid resin, a phytosterol; acetic, butyric, tiglic, angelic, oleic, linolic, cerotic, palmitic, and stearic acids; a phytosterolin, a neutral resin, a glycosidic resin, and a volatile oil were among the constituents isolated and identified.—J. Am. Chem. Soc. 1916, v. 38, p. 432–446.

Du Paul, Armand: A report of an analysis of a sample of sumbul root.—Apothecary, 1916, v. 13, No. 5, p. 22.

SUPRARENALUM SICCUM.

Ogota, Akira: From experimental researches, the author concludes that the red precipitate formed when bichromates are added to a solution of adrenalin is nothing but chromium dioxide. An abstract.—J. pharm et chim. 1916, v. 14, p. 144–145.

Cosentino, G. G.: A study of the effect of subcutaneous and intravenous injections of adrenalin upon dogs.—Arch. farmacol. sper. 1916, v. 21, p. 400–410.

Auer, J., and Gates, Frederick L.: Investigations relating to the absorption of adrenalin after intratracheal injection.—J. Exper. M. 1916, v. 23, p. 757–772.

Stewart, G. N., and Rogoff, J. N.: A report of experiments to determine the influence of certain factors, especially emotional disturbances, on the epinephrine content of the adrenales.—J. Exper. M. 1916, v. 24, p. 709–738.

Harrower, Henry R.: Notes on the action of adrenalin when given by mouth.—New York M. J. 1916, v. 104, p. 893–895.

Brown, E. D.: Observations on the effect of epinephrine on the medullary centers.—J. Pharmacol. & Exper. Therap. 1916, v. 8, p. 195–203.

Muto, K.: A report on the action of epinephrine in its relation to the secretion of sweat.—Chem. Abstr. 1916, v. 10, p. 2006 from Mitt. med. Fak. Univ. Tokyo, 1916, v. 15, No. 2.

Schapiro, F.: An investigation of the action of digitalis alone and in combination with epinephrine and thyroid upon the heart of *Rana esculenta*.—Biochem. Ztschr. 1916, v. 73, p. 1–14; see also Chem. Abstr. 1916, v. 10, p. 1680.

Meltzer, S. J.: In the treatment of infantile paralysis at the New York Throat, Nose and Lung Hospital, 2 cubic centimeters of a 1:1000 epinephrine hydrochloride solution was administered (intraspinal injection) every six hours for many days without the slightest harm.—J. Am. M. Assoc. 1916, v. 67, p. 461.

SYRUPI, N. F.

Diekman, George C.: The U. S. P. IX contains 21 syrups besides simple syrup. This is a reduction of 7 from the number found in the U. S. P. VIII. The deleted syrups are in the main unimportant ones and a number of them have found a resting place in the N. F. IV.—Pract. Drug. 1916, v. 34, No. 10, p. 26.

West, R. M.: Researches on the determination of moisture in syrups by the calcium carbide method.—J. Ind. & Eng. Chem 1916, v. 8, p. 31–35.

Keulemans, N.: A note on the preparation of maltose syrup.—Pharm. Weekblad, 1916, v. 53, p. 257–259.

SYRUPUS.

Mayer, Joseph L.: In a second paper on the inversion of cane sugar in syrup, the author confirms the observations made in his earlier work, namely, that inversion is more rapid in syrup made by the cold process than when made by the hot process.—J. Am. Pharm. Assoc. 1916, v. 5, p. 712.

SYRUPUS ACACIÆ.

Luce, E.: A discussion of the methods of Rocques and Sellier, and Bellier for the quantitative determination of acacia in syrup of acacia. Bellier's method was found to be most suitable for use in practice.—Ann. Falsif. 1916, v. 9, p. 227–231; see also J. pharm. et chim. 1916, v. 14, p. 13–19.

SYRUPUS ACIDI HYDRIODICI.

Beringer, George M.: The strength of syrup of hydriodic acid has been changed from 1.19 grams of HI in 100 cubic centimeters to 1.3 to 1.45 grams in 100 mils.—Am. Druggist, 1916, v. 64, No. 8, p. 23.

Anon.: Notes on the preparation of syrup of hydriodic acid.—N. A. R. D. J. 1916, v. 22, p. 429.

SYRUPUS AMMONII HYPOPHOSPHITIS, N. F.

Smith, F. A. Upsher: A formula for syrup of ammonium hypophosphite, accompanied by directions for its preparation, is given.—Northwestern Druggist (The), 1916, v. 17, No. 3, p. 49.

SYRUPUS BROMIDORUM, N. F.

Anon.: Notes on the preparation of syrup of the bromides.—N. A. R. D. J. 1916, v. 23, p. 413.

SYRUPUS CALCIS.

Dickman, George C.: It is unfortunate that the syrup of lime has been dropped entirely. It is used extensively and a standard should have been provided for it.—Pract. Drug. 1916, v. 34, No. 10, p. 26.

SYRUPUS ERIODICTYI AROMATICUS, N. F.

Anon.: As a clarifying agent in the preparation of the aromatic syrup of yerba santa, magnesium carbonate, precipitated calcium phosphate or kieselguhr is recommended.—N. A. R. D. J. 1916, v. 21, p. 712.

SYRUPUS FERRI IODIDI.

Toplis, Wm. G.: A description of a modified U. S. P. process for the rapid preparation of syrup of iodide of iron.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 243.

Anon.: Of 30 samples of syrup of ferrous iodide examined, 4 were found to be below standard.—Rep. Connecticut D. & F. Com. 1916, p. 19.

SYRUPUS HYPOPHOSPHITUM COMPOSITUS, N. F.

Anon.: A working formula for the preparation of the compound syrup of hypophosphites.—N. A. R. D. J. 1916, v. 21, p. 1172.

Wood, H. C., jr.: A review of the hypophosphite theory, with the statement that an unbiased study of the evidence must lead to the conclusion that any therapeutic value in the compound syrup of hypophosphites is due to the sugar it contains.—J. Am. M. Assoc. 1916, v. 66, p. 1068–1069.

SYRUPUS MORPHINAE ET ACACIAE, N. F.

François, Maurice, and Luce, E.: A report of researches relative to the determination of morphine in solutions of morphine hydrochloride and the syrup of morphine of the French Codex.—Ann. Falsif. 1916, v. 9, p. 83–90; see also J. pharm. et chim. 1916, v. 13, p. 152–155.

SYRUPUS PRUNI VIRGINIANAE.

Diekman, George C.: The change in the formula for the preparation of wild cherry syrup will meet with the approval of the pharmacist. It is very similar to that given in the U. S. P. VII, which has been followed by many pharmacists in the past, even though a different process was directed to be employed in the U. S. P. VIII.—Pract. Drug. 1916, v. 34, No. 10, p. 26.

SYRUPUS RUBI IDAEI, N. F.

Blomberg, C.: Analytical data showing the saccharose content of raspberry syrup when prepared according to different methods and stored under different conditions.—Pharm. Weekblad, 1916, v. 53, p. 337–341.

SYRUPUS SARSAPARILLÆ COMPOSITUS.

Anon.: A formula for the preparation of the syrup is presented which requires the use of crude drugs instead of the fluid extracts as directed in the U. S. P.—N. A. R. D. J. 1916, v. 21, p. 1120.

SYRUPUS SENEGÆ.

Mueller, Bertha: A description of an improved method for the preparation of syrup of senega. The fluid extract of senega is diluted with water and macerated with purified talc before adding the sugar.—Am. J. Pharm. 1916, v. 88, p. 241–243.

SYRUPUS SENNÆ AROMATICUS, N. F.

Anon.: The formula for the preparation of the aromatic syrup of senna is faulty in that only about one-half of the sugar can be brought into solution.—N. A. R. D. J. 1916, v. 22, p. 273.

Anon.: Detailed directions for the preparation of the aromatic syrup of senna are given and a revised formula is presented.—N. A. R. D. J. 1916, v. 21, p. 1065.

TALCUM PURIFICATUM.

Anon.: A short note on the production of soap stone and talc in the United States.—Oil, Paint & Drug Rep. 1916, v. 90, No. 21, p. 33.

Gottschalk, Alfred L. M.: A consular report giving the locations of the various talc deposits in Brazil.—Com. Rep. 1916, No. 298, p. 1081.

Rohland, P.: The adsorption capacity of talcum, kaolin, and clay. A comparative study.—Apoth.-Ztg. 1916, v. 31, p. 40–42; see also Chem. Abstr. 1916, v. 10, p. 1258.

Malt, F.: A study of the chemical disintegration of talc, chlorite, and biotite.—Chem. Abstr. 1916, v. 10, p. 442.

TARAXACUM.

Small, James: Facts and fancies about dandelions.—Pharm. J. 1916, v. 97, p. 157–158.

Patch, E. L.: One sample of powdered dandelion root examined yielded 45 per cent of ash. The usual yield is 9 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 538.

Roberts, J. G.: Over one-third of 13 lots of dandelion root examined were of inferior quality or were adulterated.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 112.

TEREBINTHINÆ, N. F.

Herty, Charles H.: An illustrated paper describing the turpentine industry in the Southern States.—J. Franklin Institute. 1916, v. 181, p. 339–367.

Henrich, F.: Notes on the collection of turpentine oleoresin in Germany.—Chem.-Ztg. 1916, v. 40, p. 673–674.

Wislicenus, H.: A description of improvements in the methods for the collection of oleoresins.—Chem.-Ztg. 1916, v. 40, p. 559–560.

Troup, R. S.: Data showing the physical and chemical properties of the oleoresin and oil of turpentine obtained from Indian *Pinus longifolia*.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 243–245, 280–282.

Casey, F. W.: Of five samples of turpentine examined, four were rejected.—Bull. Michigan D. & F. Dept. 1916, No. 252–255, p. 19.

Congdon, Leon A.: One sample of wood turpentine examined was rejected.—Rep. Kansas Bd. Health, 1916, p. 133.

TERRA SILICEA PURIFICATA.

Scoville, W. L.: Infusorial earth, if used for filtering purposes, must be watched closely. Even insoluble carbonates are detrimental, and carbonates are frequently found.—J. Am. Pharm. Assoc. 1916, v. 5, p. 539.

Ewe, G. E.: Much of the kieselguhr on the market is unignited, dark in color, and contains organic matter. For pharmaceutical purposes, ignited kieselguhr, nearly white in color and free from organic matter, is preferable.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 113.

Vanderkleed, C. E.: Much of the kieselguhr offered for pharmaceutical use contains organic matter, from which it should be freed by ignition.—J. Am. Pharm. Assoc. 1916, v. 5, p. 540.

THEOBROMINÆ SODIO-SALICYLAS.

Lefeldt, M.: Attention is directed to the high (10 per cent) water content permitted by the Ph. Germ. for this preparation. Five per cent is considered to be ample.—Chem. Abstr. 1916, v. 10, p. 1773 from Pharm. Ztg. 1916, v. 61, p. 150.

THYMOL.

Holmes, E. M.: This may be obtained from the volatile oil of *Thymus vulgaris* and "some other oils," the names of which are not mentioned.—Pharm. J. 1916, v. 97, p. 485.

Dubosc, A.: A consideration of various plants as sources from which thymol may be obtained.—Chem. Abstr. 1916, v. 10, p. 251.

Norton, H.: On the sources and methods of obtaining thymol.—Am. Perf. 1916, v. 11, p. 288.

Hood, Samuel C.: The commercial production of thymol from horsemint (*Monarda punctata*).—Bull. U. S. Dept. Agric. 1916, No. 372, p. 1–12.

Anon.: The Technical Laboratory of the Department of Industries, United Provinces of India, has issued a circular advocating the manufacture of thymol in India, stating that it can be undertaken without difficulty where the raw material is so plentiful, and that very good samples have been obtained through experiments in the industry conducted at the laboratory.—Com. Rep. 1916, No. 37, p. 610.

Anon.: In the new edition of the Finnish pharmacopœia, the melting point of thymol is gven as 50° to 52° C.—Am. Perf. 1916, v. 11, p. 94.

Editorial: Facts about the behavior of thymol in the body. Thymol is an antiseptic comparable in many ways to phenol and cresol, but is less soluble in water, and for this reason, it is supposed to be absorbed with greater difficulty in the alimentary tract.—J. Am. M. Assoc. 1916, v. 66, p. 746–747.

Schultz, W. H.: A study of the influence of various solvents on the toxicity of thymol. Its parasiticidal powers were found to be greatly diminished when it is dissolved in oil.—Chem. Abstr. 1916, v. 10, p. 2598.

THYMUS, N. F.

Anon.: A short note giving information relative to the cultivation of thyme in America.—N. A. R. D. J. 1916, v. 21, p. 704.

THYROIDEUM SICCUM.

Kendall, Edward: Recent advances in our knowledge of the active constituent of the thyroid; its chemical nature and function.—Boston M. & S. J. 1916, v. 175, p. 557–562.

Graham, Allen: A study of the physiological activity of adenomata of the thyroid gland in relation to the iodine content, as evidenced by feeding experiments on tadpoles.—J. Exper. M. 1916, v. 24, p. 345–36.

Roberts, J. G.: Determinations of the iodine content showed that two lots of thyroid glands examined contained 0.20 and 0.18 per cent, respectively.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 118.

Tatum, A. L.: Notes on the use of Mallory's connective tissue stain as an indicator of thyroid colloid.—J. Med. Research, 1916, v. 35, p. 95–106.

Bube, S. P.: In a discussion of the therapeutic application of human thyroid, the author describes a method for preparing the extract.—New York M. J. 1916, v. 104, p. 445–449.

Morris, Roger S.: A discussion of the probable toxic effects of prolonged administration of parathyroid gland.—J. Lab. & Clin. Med. 1916, v. 1, p. 26–30.

Asher, Leon: Experimental data relating to the physiological action of thyroid secretion and methods for the identification of the same.—Deutsch. med. Wchnschr. 1916, v. 42, p. 1028–1030.

Beebe, S. P.: An enumeration of the therapeutic applications of human thyroid extract.—New York M. J. 1916, v. 104, p. 445–449.

TINCTURÆ.

Dickman, George C.: The number of tinctures now official in the Pharmacopœia is 54, 10 having been omitted. The deleted tinctures will hardly be missed, however, as most of them have found a place in the National Formulary.—Pract. Drug. 1916, v. 34, No. 10, p. 24.

Scoville, W. L.: A discussion of the data obtained in experiments to determine the relative stability of tinctures prepared from fluid extracts and those prepared according to the U. S. P. methods.—Midl. Bros. Drug. 1916, v. 50, p. 4–8.

Mossler, G., and Markus, F.: A description of a simple, rapid method for the estimation of alcohol in tinctures. The method is based on the determination of the critical solution temperature of a mixture of benzene with the tincture to be examined. An abstract.—Ann. Falsif. 1916, v. 9, p. 107.

Palme, Herman: A discussion of the relationship between specific weight and the alcohol and extract content of tinctures. An equation is given for expressing this relation.—Svensk farm. Tidskr. 1916, v. 20, p. 373–377.

TINCTURA ACONITI.

Haskell, Charles C.: The quality of the tincture as indicated by physiological and chemical assays. The results obtained in the chemical assay are no indication of the activity of the preparation.—Am. Druggist, 1916, v. 64, No. 4, p. 23–24.

Haskell, Charles C., and Thomas, H. B.: A comparison of the results obtained by the guinea pig and cat methods for the assay of the tincture of aconite.—Am. J. Pharm. 1916, v. 88, p. 3–7.

Haskell, Charles C.: An investigation of the effect of seasonal variation on the resistance of guinea pigs to poisoning by tincture of aconite.—Am. J. Pharm. 1916, v. 88, p. 243–246.

Eskew, Harry L.: Of eight samples of tincture of aconite examined, seven were rejected.—Rep. Tennessee F. & D. Dept. 1916, p. 16.

TINCTURA ARNICÆ.

Frary, Guy G.: One sample of tincture of arnica examined was rejected because it contained less alcohol than specified on the label.—Rep. South Dakota F. & D. Com. 1916, No. 16, p. 150.

TINCTURA BELLADONNÆ FOLIORUM.

Eskew, Harry L.: Of three samples of tincture of belladonna examined, one was rejected for being below standard.—Rep. Tennessee F. & D. Dept. 1916, p. 16.

TINCTURA CARDAMOMI COMPOSITA.

Hill, C. A., and Umney, J. C.: In the preparation of the Ph. Brit. compound tincture of cardamon, it is recommended that a 60 per cent alcohol be used, and that the glycerin ratio be 1 in 20 in order to avoid precipitation of the oils and to prevent gelatinization.—Brit. & Col. Pharm. 1916, v. 69, p. 602.

TINCTURA CIMICIFUGÆ, N. F.

Tittle, Ella M.: A discussion of the physiological action of tincture of cimcifuga.—J. Am. Inst. Homoeop. 1916, v. 8, p. 1040–1042.

TINCTURA DIGITALIS.

Scholar, Abel: The author recommends preparing the tincture by exhausting the drug with cold distilled water and adding sufficient alcohol (90 per cent) to bring the alcoholic strength to 69 to 70 per cent.—Chem. & Drug. 1916, v. 88, p. 870.

TINCTURA FERRI CHLORIDI.

Frary, Guy G.: Two of three samples of tincture of ferric chloride examined were rejected for being low in iron content.—Rep. South Dakota F. & D. Com. 1916, No. 16, p. 150.

Todd, A. R.: Of two samples of tincture of ferric chloride examined, one was rejected.—Bull. Michigan D. & F. Dept. 1916, No. 244–247, p. 20.

Wood, H. C., jr.: Tincture of ferric chloride is valuable as an external remedy for checking hemorrhage, but it should not be administered internally as it is liable to cause constipation. Furthermore, it is strongly irritant to mucous membranes and will often provoke nausea.—J. Am. M. Assoc. 1916, v. 66, p. 1072.

TINCTURA GENTIANAE COMPOSITA.

Anon.: Notes on the preparation of compound tincture of gentian.—N. A. R. D. J. 1916, v. 22, p. 428.

TINCTURA IODI.

Dickman, George C.: The addition of 50 mils of distilled water to each 1,000 mils of tincture of iodine as directed by the U. S. P. IX should greatly facilitate the manufacture of this preparation. There

should be no further complaint concerning undissolved material and subsequent shortage in iodine content. If the present directions are followed, a standard product will result.—Pract. Drug. 1916, v. 31, No. 10, p. 24.

Anon.: Compressed tablets composed of iodine and potassium iodide are being used in France for the extemporaneous preparation of tincture of iodine.—Boll. chim.-farm. 1915, v. 54, p. 170; see also Chem. Abstr. 1916, v. 10, p. 2384.

Pisarzhevskii, L., and Tyel'nui, S.: In discussing electrolytic methods for obtaining solid iodine from solutions, the author refers to the direct preparation of the tincture of iodine from alcoholic solutions of iodides.—Chem. Abstr. 1916, v. 10, p. 1731.

Gianturco, E.: A discussion of methods for the prevention of the alteration of tincture of iodine intended for use in military surgery. The use of 1 per cent of iodic acid is recommended as a preservative in preference to potassium iodide. An abstract.—U. S. Naval Med. Bull. 1916, v. 10, p. 314–317.

Rho, F.: A discussion of the inconveniences due to the use of tincture of iodine in war times and suggestions for overcoming these troubles.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 203–205.

Claret, A.: The addition of borax is recommended for the preservation of tincture of iodine.—Boll. chim.-farm. 1915, v. 54, p. 584; see also Chem. Abstr. 1916, v. 10, p. 2385.

Hugenholz: Tincture of iodine may be preserved unchanged by storing in partially filled glass containers and exposing the latter to light.—Boll. chim.-farm. 1915, v. 54, p. 584; see also Chem. Abstr. 1916, v. 10, p. 2385.

Crouzel, E.: The author recommends the use of an ethereal solution of iodine in place of the alcoholic tincture for the treatment of wounds. Irritation due to the HI formed in the tincture is thus eliminated.—Boll. chim.-farm. 1915, v. 54, p. 583; see also Chem. Abstr. 1916, v. 10, p. 2384.

Schmerz, H.: As a substitute for tincture of iodine, a solution of 5 to 10 parts of tannin in alcohol is recommended.—Südd. Apoth.-Ztg. 1916, v. 56, p. 191.

Hostmann, Jeannot: Of 20 samples of tincture of iodine examined, 4 were not of U. S. P. standard with respect to iodine content and some of them did not contain the proper amount of potassium iodide.—Proc. New Jersey Pharm. Assoc. 1916, p. 77.

Lea, E. J.: The samples of tincture of iodine examined were slightly deficient in iodine, and two of them contained practically no potassium iodide.—Bull. California Bd. Health, 1916, v. 12, p. 112.

Stinson, Ray: The percentage strengths of the samples of tincture of iodine examined were below the official standard.—Proc. North Dakota Pharm. Assoc., 1916, p. 112.

Table showing some of the analytical results reported for tincture of iodine.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Anon.	57	45	Proc. Maryland Pharm. Assoc. 1916, p. 84–91.
Do.	25	16	Proc. Minnesota Pharm. Assoc. 1916, p. 210.
Do.	39	18	Bull. Vermont Bd. Health, 1916, v. 16, No. 3; v. 1, No. 2.
Do.	1	1	Rep. Wyoming D. F. & O. Com. 1916, v. 2, No. 7, p. 32.
Barnard, H. E.	27	14	Bull. Indiana Bd. Health, 1916, v. 19, p. 39.
Eskew, Harry L.	2	1	Rep. Tennessee F. & D. Dept. 1916, p. 16.
Frary, Guy C.	11	7	Rep. South Dakota F. & D. Com. 1916, No. 16, p. 147.
Lythgoe, Hermann C.	191	25	Rep. Massachusetts Bd. Health, 1916, p. 450.
Tice, William G.	104	57	Rep. New Jersey Dept. Health, 1916, p. 72.
Todd, A. R.	99	59	Bull. Michigan D. & F. Dept. 1916, No. 244–247, p. 20; Nos. 248–249, p. 10; Nos. 250–251, p. 16, Nos. 252–255, p. 19.

TINCTURA NUCIS VOMICÆ.

Dickman, George C.: The change in the method of preparation of tincture of nux vomica appears to be a desirable one. It is believed, however, that the change in the alkaloidal standard will prove to be unsatisfactory.—Pract. Drug. 1916, v. 34, No. 10, p. 24.

Todd, A. R.: Of four samples of tincture of nux vomica examined, three were rejected for being low in alkaloidal content.—Bull. Michigan D. & F. Dept. 1916, No. 244–247, p. 20.

TINCTURA OPII.

Dickman, George C.: The change in the morphine content of the tinctures containing opium is due to the change in the morphine requirements for opium. The difference, however, is more apparent than real and makes very little difference, if any, in the therapeutic value of these preparations.—Pract. Drug. 1916, v. 34, No. 10, p. 24.

Anon.: Druggists can correct the strength of the tinctures of opium which they have on hand by diluting them with 17 per cent of diluted alcohol; that is, 100 fluid ounces of the old tincture may be diluted to 117 fluid ounces, with dilute alcohol, to make the U. S. P. IX tincture.—Drug Topics, 1916, v. 31, No. 8, p. 21.

Editorial: Pharmacists should add to each 10 fluid ounces of old tincture of opium in stock enough alcohol (46 per cent by volume) to make 11.8 fluid ounces in order to make the preparation conform to the U. S. P. IX requirements.—Virginia Pharmacist, 1916, v. 1, p. 45.

Bohrisch, P., and Kuerschner, F.: Fromme's suggested aluminum acetate method for the estimation of morphine in the tincture of opium offers no material advantages.—Apoth.-Ztg. 1916, v. 31, p. 53–55 through Chem. Abstr. 1916, v. 10, p. 1251.

Hesselbo, A.: A critical examination of the method of Dieterich for the assay of tincture of opium as given in the Ph. Dan.—Chem.

Abstr. 1916, v. 10, p. 951 from Arch. Pharm. og Chem. 1915, v. 22, p. 18–26, 48–55, 74–84.

McGill, A.: Of 127 samples of tincture of opium examined, 31 were below standard.—Bull. Lab. Inl. Rev. Dept. Canada, 1916, No. 315, p. 3.

TINCTURA STROPHANTHI.

Anon.: Notes on the preparation of the tincture of strophanthus.—N. A. R. D. J. 1916, v. 22, p. 1184.

Anon.: Tincture of strophanthus is incompatible with water. When it is mixed with water it undergoes hydrolysis with the formation of a toxic substance. An abstract.—Pract. Drug. 1916, v. 34, No. 6, p. 39.

Hatcher, R. A.: A report on an investigation showing that the emetic action of tincture of strophanthus is not due to the fixed oil content.—J. Am. M. Assoc. 1916, v. 66, p. 1199.

Clampett, G. W.: Of six samples of tincture of strophanthus examined, the strophantin content in 100 cubic centimeters ranged from 0.07 to 0.400 per cent.—Proc. Texas Pharm. Assoc. 1916, p. 80.

TINCTURA VANILLÆ, N. F.

Dean, J. R., and Schlotterbeck, J. O.: A report of investigations dealing with the preparation and properties of the extract of vanilla. Special reference is made concerning the relation of the lead number to the quality of the tincture.—J. Ind. & Eng. Chem. 1916, v. 8, p. 607–614, 703–709.

Dox, Arthur W., and Plaisance, G. P.: An account of the determination of vanillin in vanilla extract by precipitation with thiobarbituric acid.—Am. J. Pharm. 1916, v. 88, p. 481–484.

TINCTURA ZINGIBERIS.

Lea, E. J.: Many of the samples of tincture of ginger examined were materially below the standard. Some contained less than 50 per cent of the required alcohol and very few even approximated the standard.—Bull. California Bd. Health, 1916, v. 11, p. 648.

Table showing some of the analytical results reported for tincture of ginger.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Lea, E. J.	.....	3	Bull. California Bd. Health, 1916, v. 12, p. 112, 345.
McGill, A.	65	24	Bull. Lab. Inl. Rev. Dept. Canada, 1916, No. 336, p. 5.
Sudro, W. F.	57	7	Bull. North Dakota Exper. Sta. F. Dept. 1916, v. 4, p. 179.
Todd, A. R.	2	1	Bull. Michigan D. & F. Dept. 1916, No. 241–7, p. 20.

TINCTURÆ HERBARUM RECENTUM.

Dickman, George C.: The deletion of the formula for tinctures of fresh herbs meets with uniform approval. A more useless formula can not be well imagined. The few who still dwell in the realms of ancient pharmacy will find solace in the fact that this item is now in the N. F.—Pract. Drug. 1916, v. 34, No. 10, p. 24.

TOXITABELLÆ HYDRARGYRI CHLORIDI CORROSIVI.

Levy, Lewis Spencer: A description of a corrosive sublimate tablet which can not be swallowed whole and which will produce emesis if broken and swallowed in part.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1229–1231.

Walter: A discussion of the Ph. Germ. V and the Sasse methods for the evaluation of mercuric chloride tablets. A method for determining the amount of mercuric chloride when it constitutes less than 20 per cent of the total ingredients is also described.—Chem. Zentralbl. 1916, v. 87, part 2, p. 283.

Strickland, D. K.: Descriptions of methods for the determination of mercuric chloride in tablets.—J. Ind. & Eng. Chem. 1916, v. 8, p. 253.

TRAGACANTHA.

Schneider, Albert: In the U. S. P. description of tragacanth no mention is made of the fact that deepening of color (brownish) and numerical increase in starch granules in the different commercial tragacanths is in inverse ratio to the quality of this article.—Drug. Circ. 1916, v. 60, p. 693.

Rusby, H. H.: Tragacanth several shades darker than that specified by the U. S. P. makes a perfectly white powder. Its use should therefore be permitted.—J. Am. Pharm. Assoc. 1916, v. 5, p. 544.

Ewe, G. E.: Experiments conducted in the Mulford Analytical Laboratories show that, almost without exception, market samples of ribbon tragacanth, when mixed with water, furnish a liquid which is several times more viscous than the mixture of an equal weight of powdered tragacanth with the same quantity of water.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 118; see also Drug. Circ. 1917, v. 61, No. 12, p. 25.

von Fellenberg: Descriptions of some of the properties of bassorin, the water-soluble constituent of tragacanth. An abstract.—Drug. Circ. 1916, v. 60, p. 398.

Gutbier, A., et al.: A report of an investigation of the colloidal chemical properties of tragacanth extract.—Chem. Zentralbl. 1916, v. 87, part 2, p. 46.

TRILLIUM, N. F.

Anon.: A short note giving information relative to the cultivation of bethroot in America.—N. A. R. D. J. 1916, v. 21, p. 1275.

TRINITROPHENOL.

Castetes, J.: A description of a new reaction for the detection of picric acid and a discussion of the application of the same in the examination of urine and beer. Brom-dinitrophenol is first formed. The test then depends upon the color reactions which result upon the addition of ammonia or potassium cyanide.—J. pharm. et chim. 1916, v. 13, p. 46–49.

Boon, A. A., and Ogilvie, J.: Experimental data showing that picric acid and picrates can be evenly titrated with ferric chloride.—Pharm. J. 1916, v. 97, p. 21–22.

Boon, A. A., and Ogilvie, J.: A description of a method for the quantitative determination of picric acid by the use of a standard solution of titanous chloride.—Pharm. J. 1916, v. 97, p. 213–214.

Barral, Et.: A report of researches to determine the presence of picric acid in the case of simulated icterus.—Ann. Falsif. 1916, v. 9, p. 231–244.

Kohn-Abrest, E.: A report of investigations bearing on the determination of picric acid in the urine and viscera.—Ann. Falsif. 1916, v. 9, p. 63–68.

Ydrac: A description of a method for the detection of picric acid in the urine which depends on the formation of potassium isopurpurate.—Ann. chim. analyt. 1916, v. 21, p. 225.

Pecker, H.: A chemical study of picric acid poisoning.—J. pharm. et chim. 1916, v. 14, p. 152–154.

Brown, T. F.: Notes on the use of picric acid in war surgery. A report on the treatment of 3,000 cases.—Lancet, 1916, v. 2, p. 433.

TRITICUM.

Lilly, J. K.: Six lots of couch grass examined consisted of the cut stems of the plant and only a small portion of rhizomes.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

Roberts, J. G.: One lot of couch grass examined contained 6 per cent of foreign roots.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 111.

TROCHISCI.

Diekman, George C.: The reduction in the number of kinds of troches from nine to five will not be criticized. In fact, if all had been deleted there would have been but few mourners, especially as the N. F. contains numerous formulas for this class of preparations.—Pract. Drug. 1916, v. 34, No. 10, p. 26.

ULMUS.

Anon.: A short note giving information relative to the production and collection of slippery elm bark in America.—N. A. R. D. J. 1916, v. 21, p. 1056.

Schneider, Albert: In the U. S. P. description of ulmus bark, no mention is made of the strikingly characteristic twin crystals.—Drug. Circ. 1916, v. 60, p. 693.

UNGUENTA.

Anon.: Notes on the preparation of ointments containing various metals or their oxides in colloidal form.—Apoth.-Ztg. 1916, v. 31, p. 79.

Maske, William, jr.: Notes on the incorporation of medicinal substances with ointment bases by means of volatile solvents.—Proc. Washington Pharm. Assoc. 1916, p. 89–90.

Anon.: A number of formulas for the preparation of substitute ointment bases, so-called war bases, is presented.—Pharm. Zentralh. 1916, v. 57, p. 96.

Cook, E. Fullerton: Notes on the sanitary dispensing of ointments.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 291–293.

UNGUENTUM AQUAE ROSAE.

Anon.: A discussion of a formula for the preparation of a stable cold cream.—Svensk farm. Tidskr. 1916, v. 20, p. 81–82.

UNGUENTUM HYDRARGYRI.

Strickland, Donald K.: Laboratory notes on the quantitative determination of mercury in various pharmaceutical preparations containing the metal or its compounds.—J. Ind. & Eng. Chem. 1916, v. 8, p. 256–257.

UNGUENTUM HYDRARGYRI AMMONIATI.

Strickland, D. K.: A description of an assay process for the determination of the mercury in ointment of ammoniated mercury.—J. Ind. & Eng. Chem. 1916, v. 8, p. 253.

UNGUENTUM HYDRARGYRI DILUTUM.

Beringer, George M.: The strength of diluted mercurial ointment has been reduced from 33⅓ per cent to 30 per cent, in order to comply with the International Protocol.—Am. Druggist, 1916, v. 64, No. 8, p. 23; see also George Dickman, Pract. Drug. 1916, v. 34, No. 10, p. 26.

UNGUENTUM HYDRARGYRI NITRATIS.

Strickland, D. K.: A description of a method for the determination of mercury in the ointment of mercuric nitrate.—J. Ind. & Eng. Chem. 1916, v. 8, p. 253.

UNGUENTUM HYDRARGYRI OXIDI FLAVI.

Sjoestroem, F. W.: A paper discussing the preparation and assay of the ointment of yellow oxide of mercury. A method in which the freshly prepared moist oxide ($HgCl_2+2NaOH=HgO+2NaCl+H_2O$) is first incorporated in lanolin is described. A volumetric method for the determination of the oxide is also described.—Pharm. Ztg. 1915, v. 60, p. 544–545; see also Chem. Abstr. 1916, v. 10, p. 2276.

Strickland, Donald K.: A method for the quantitative determination of the mercury in the ointment of yellow oxide of mercury is described.—J. Ind. & Eng. Chem. 1916, v. 8, p. 256–257.

UNGUENTUM HYDRARGYRI OXIDI RUBRI, N. F

Strickland, D. K.: A description of a method for the determination of mercury in the ointment of red mercuric oxide.—J. Ind. & Eng. Chem. 1916, v. 8, p. 253.

UNGUENTUM IODI.

Shimer, M. H.: For the extemporaneous preparation of iodine ointment, the author recommends using a glycerite of iodine prepared by mixing the iodine, potassium iodide, and glycerin in the proportions given in the U. S. P.—Meyer Bros. Drug. 1916, v. 37, p. 271.

Perusse, F. J.: The author expresses the opinion that the lard directed to be used in the preparation of iodine ointment should be replaced by a base which will not absorb iodine, such as a mixture of lanolin and petrolatum.—Merck's Rep. 1916, v. 25, p. 77.

Platt, W. R., and Smith, H. I.: In order to prepare a stainless iodine ointment, that is, one in which all of the iodine is combined, the authors suggest the use of a soft paraffin containing comparatively large amounts of unsaturated hydrocarbons.—Pharm. J. 1915, v. 95, p. 544–546; see also Chem. Abstr. 1916, v. 10, p. 803.

Anon.: A method for the preparation of a nonstaining iodine ointment consists of mixing powdered iodine with melted vaseline and heating the mixture on a water bath until it becomes homogeneous.—Boll. chim.-farm. 1915, v. 54, p. 584; see also Chem. Abstr. 1916, v. 10, p. 2385.

UNGUENTUM IODOFORMI.

Ritchie, D. F.: The iodoform ointment of the new Brit. Ph. is pharmaceutically unsound. The iodoform is decomposed by the fatty acids developed in the lard.—Pharm. J. 1916, v. 41, p. 559.

UNGUENTUM RESORCINOLIS COMPOSITUM, N. F.

Breifeld: For the preparation of smooth ointments of resorcinol, the use of a very fine powder is recommended. The same results may be obtained by incorporating the resorcinol in the form of a very concentrated ethereal solution.—Boll. chim.-farm. 1916, v. 55, p. 296.

Anon.: Notes on the preparation of compound resorcinol ointment call attention to the necessity for using petrolatum of U. S. P. quality in order to avoid discoloration.—N. A. R. D. J. 1916, v. 23, p. 193–194.

Anon.: The compound resorcin ointment as made by different pharmacists lacks uniformity owing to the fact that the oil of cade used in its preparation is variable in composition, is often adulterated, the latter being sometimes obtained from ordinary juniper wood.—N. A. R. D. J. 1916, v. 21, p. 919.

Cook, E. Fullerton: The oil of cade formerly used in the preparation of compound resorcinol ointment has been replaced by rectified oil of birch tar. By this means the darkening of the ointment upon standing has been prevented.—Drug. Circ. 1916, v. 60, p. 543.

UNGUENTUM ZINCI OXIDI.

Austin, R. A.: A description of an easy method for preparing oxide of zinc ointment.—Proc. New York Pharm. Assoc. 1916, p. 268.

Mueller, Ambrose: The U. S. P. ointment of zinc oxide can be improved upon by substituting benzoinated white petrolatum for benzoinated lard. By this means the tendency of the ointment to become rancid is avoided.—Pract. Drug. 1916, v. 34, No. 4, p. 36.

Anon.: A report of a court case in England in which a low zinc oxide content of the ointment proved to be due to the settling of the heavier particles of zinc oxide to the bottom of the container.—Brit. Food J. 1916, v. 18, p. 389.

Anon.: Thirteen samples of zinc ointment examined were found to be of U. S. P. quality.—Rep. Massachusetts Bd. Health, 1916, p. 450.

Casey, F. W.: Of five samples of zinc oxide ointment examined, two were rejected.—Bull. Michigan D. & F. Dept. 1916, No. 252–255, p. 19.

Stinson, Ray: Thirty-six of the 85 samples of ointment of zinc oxide examined were strictly U. S. P. Five of the samples contained less than the required amount of zinc oxide.—Proc. North Dakota Pharm. Assoc. 1916, p. 111.

Terry, R. W.: The two samples of ointment of zinc oxide examined were of U. S. P. standard.—Proc. Ohio Pharm. Assoc. 1916, p. 58.

VALERIANA.

Anon.: A short note giving information relative to the cultivation of valerian in America.—N. A. R. D. J. 1916, v. 21, p. 804.

Holste, Arnold: A general discussion of valerian root and its various preparations.—Deutsch. med. Wchnschr. 1916, v. 42, p. 599–601.

van der Wielen, P.: From experiments, it is concluded that the development of the odor in valerian root is due to the action of a ferment. If the enzyme is killed before drying the root, the odor develops to a slight degree only. If an infusion of the root is warmed with a little hydrochloric acid, the odor soon develops.—Chem. & Drug. 1916, v. 88, p. 911.

Pilcher, Delzell, and Burman: A report of investigations to determine the action of valerian on the excised uterus of the guinea pig.—J. Am. M. Assoc. 1916, v. 67, p. 490–492.

VANILLA, N. F.

Anon.: An account of the production of vanilla in the French colonies. It is estimated that these colonies furnish about two-thirds of the world's supply and that France consumes about one-tenth of the total amount herself.—Pharm. J. 1916, v. 97, p. 433.

Anon.: Information concerning the growing of vanilla in the Seychelles.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 17.

Lespinasse, A. J.: A short account of the cultivation of vanilla in Mexico.—Midl. Drug. 1916, v. 50, p. 22.

Costantin and Bois: Descriptions of the different botanical varieties of vanilla.—Compt. rend. acad. sc. 1916, v. 163, p. 466–470.

Rabak, Frank: A report of investigations to determine the effect of curing on the aromatic constituents of vanilla beans.—J. Ind. & Eng. Chem. 1916, v. 8, p. 815–821.

von Fellenberg, P.: A description of a colorimetric method for the determination of vanillin in vanilla. The method is based on the color which develops with concentrated sulphuric acid and isobutyl alcohol.—Analyst (The), 1916, v. 41, p. 280.

VANILLINUM.

Anon.: Remarks on the chemistry, manufacture, and testing of vanillin.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 248–249.

Arny, H. V., and Ring, C. H.: A report on colorimetric tests for vanillin.—J. Ind. & Eng. Chem. 1916, v. 8, p. 315–316.

Stinson, Ray: A sample of vanillin examined was found to consist largely of salicylic acid. It began to soften at 70° C. and was not completely melted at 95° C.—Proc. North Dakota Pharm. Assoc. 1916, p. 113.

VERATRINA.

Frankforter and Kritchevsky: Descriptions of two compounds formed as a result of the interaction of veratrine and chloral or bromal in a carbon disulphide solution.—Chem. & Drug. 1916, v. 88, p. 737.

Deelman, H. T.: A report of a study to determine the origin of the veratrine curve obtained in poisoning of the muscles with veratrine.—Chem. Abstr. 1916, v. 10, p. 2373.

VERATRUM VIRIDE.

Anon.: A short note giving information relative to the production and collection of hellebore root in America.—N. A. R. D. J. 1916, v. 21, p. 1227.

Patch, E. L.: Three lots of white hellebore examined yielded 0.9, 1.04, and 1.41 per cent of alkaloids, respectively. The ash content of the same varied from 11 to 13 per cent.—J. Am. Pharm. Assoc. 1916, v. 5, p. 539.

VIBURNUM OPULUS, N. F.

Anon.: A short note giving information relative to the production and collection of cramp bark in America.—N. A. R. D. J. 1916, v. 21 ,p. 1227.

Lilly, J. K.: Two lots offered as cramp bark consisted of the bark of *Acer spicatum*.—Oil, Paint & Drug Rep. 1916, v. 90, No. 16, p. 46.

Pilcher, Delzell, and Burman: A report of investigations to determine the action of cramp bark on the excised uterus of the guinea pig.—J. Am. M. Assoc. 1916, v. 67, p. 490–492.

VIBURNUM PRUNIFOLIUM.

Anon.: A short note giving information relative to the production and collection of black haw bark in America.—N. A. R. D. J. 1916, v. 21, p. 1227.

Holmes, E. M.: Under the name of viburnum prunifolium, the bark of *V. Lentago*, Linné, is official, as well as that of *V. prunifolium*, but its distinctive characters are not given. There is no doubt that the bark of *V. Lentago* is often mixed with that of *V. prunifolium*, and the U. S. P. thus recognizes the fact.—Pharm. J. 1916, v. 97, p. 485.

Warren, L. E.: Analytical data relating to the composition of the bark of the root of viburnum prunifolium are presented.—Rep. Chem. Lab. Am. M. Assoc. 1916, p. 92–93, 98–103.

Pilcher, Delzell, and Burman: A report of investigations to determine the action of black haw on the excised uterus of the guinea pig.—J. Am. M. Assoc. 1916, v. 67, p. 490–492.

VINA MEDICATA.

Sayre, L. E.: The members of the U. S. P. revision committee appear to have understood section A, article 2 of the International Protocol to mean that no potent medicament should be prepared in the form of a medicinal wine, and, hence, they have excluded from the Pharmacopœia all wines, including the much used wines of colchicum and antimony.—Pharm. Era, 1916, v. 49 p. 307–308.

Scoville, Wilbur L.: All wines have been deleted from the U. S. P. They were the forerunners of the tinctures and maintained their place for years because of the vinous odor and flavor. They have no advantages over the corresponding tinctures and are gradually passing into history.—Bull. Pharm. 1916, v. 30, p. 365.

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HYGIENIC LABORATORY BULLETINS OF THE PUBLIC HEALTH SERVICE.

The Hygienic Laboratory was established in New York, at the Marine Hospital on Staten Island, August, 1887. It was transferred to Washington, with quarters in the Butler Building, June 11, 1891, and a new laboratory building, located in Washington, was authorized by act of Congress March 3, 1901.

Of the bulletins published by the laboratory since its establishment, copies of the following are available for distribution and may be obtained without cost by applying to the Surgeon General, United States Public Health Service, Washington, D. C.

No. 2.—Formalin disinfection of baggage without apparatus. By M. J. Rosenau.

No. 43.—The standardization of tetanus antitoxin (an American unit established under authority of the act of July 1, 1902). By M. J. Rosenau and John F. Anderson.

No. 44.—Report No. 2 on the origin and prevalence of typhoid fever in the District of Columbia, 1907.—By M. J. Rosenau, L. L. Lumsden, and Joseph H. Kastle.

No. 45.—Further studies upon anaphylaxis. By M. J. Rosenau and John F. Anderson.

No. 46.—*Hepatozoon perniciosum* (n. g., n. sp.); a hæmogregarine pathogenic for white rats; with a description of the sexual cycle in the intermediate host, a mite (*lelaps echidninus*). By W. W. Miller.

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No. 51.—Chemical tests for blood. By Joseph H. Kastle.

No. 52.—Report No. 3 on the origin and prevalence of typhoid fever in the District of Columbia (1908). By M. J. Rosenau, Leslie L. Lumsden, and Joseph H. Kastle.

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No. 66.—I. The influence of age and temperature on the potency of diphtheria antitoxin. By John F. Anderson. II. An organism (*Pseudomonas proteus*) isolated from water, agglutinated by the serum of typhoid-fever patients. By W. H. Frost. III. Some considerations on colorimetry, and a new colorimeter. By Norman Roberts. IV. A gas generator in four forms, for laboratory and technical use. By Norman Roberts.

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No. 76.—The physiological standardization of ergot. By Charles Wallis Edmunds and Worth Hale.

No. 78.—Report No. 4 on the origin and prevalence of typhoid fever in the District of Columbia (1909). By L. L. Lumsden and John F. Anderson. (Including articles contributed by Thomas B. McClintic and Wade H. Frost.)

No. 81.—Tissue proliferation in plasma medium. By John Sundwall.

No. 84.—Digest of comments on the Pharmacopœia of the United States of America (eighth decennial revision) and the National Formulary (third edition) for the calendar year ending December 31, 1910. By Murray Galt Motter and Martin I. Wilbert.

No. 85.—Index-catalogue of medical and veterinary zoology. Subjects: Cestoda and cestodaria. By Ch. Wardell Stiles and Albert Hassall.

No. 86.—Studies on typhus. By John F. Anderson and Joseph Goldberger.

No. 87.—Digest of comments on the Pharmacopœia of the United States of America (eighth decennial revision) and on the National Formulary (third edition) for the calendar year ending December 31, 1911. By Murray Galt Motter and Martin I. Wilbert.

No. 89.—Sewage pollution of interstate and international waters with special reference to the spread of typhoid fever. VI. The Missouri River from Sioux City to its mouth. By Allan J. McLaughlin.

No. 90.—Epidemiologic studies of acute anterior poliomyelitis. I. Poliomyelitis in Iowa, 1910. II. Poliomyelitis in Cincinnati, Ohio, 1911. III. Poliomyelitis in Buffalo and Batavia, N. Y., 1912. By Wade H. Frost.

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