

BIBLIOGRAPHY OF PHARMACEUTICAL RESEARCH

Compiled by A. G. DuMez, Reporter on the Progress of Pharmacy.

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APPARATUS AND MANIPULATIONS.

- Anon
Torsion balance for the rapid weighing of small quantities
Pharm. Ztg., 68 (1923), 756
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A gas-tight stirrer
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Ind. & Eng. Chem., 15 (1923), 1189
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Standardization of commercial viscometers
Ind. & Eng. Chem., 15 (1923), 1109
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Use of helium light in refractometry
Ber. deutsch. chem. Ges., 56 (1923), 1047; through *J. Soc. Chem. Ind.*, 42 (1923), 631A

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- Anon
Third supplement to the French Pharmacopœia
Chem. & Drug., 99 (1923), 587

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- Anon
Tasteless syrup of iodide of iron
Am. Drug., 71 (Nov. 11, 1923), 13
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Cyclohexanol soaps
Rev. Prod. Chim. (1923), 362; through *J. pharm. Belg.*, 5 (1923), 645
Kilbourne, Dale G.
Methylene blue for coloring spirit of peppermint
Drug. Circ., 67 (1923), 452
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Adsorption of alkaloids from elixirs
J. Am. Pharm. Assoc., 12 (1923), 864

Lesure, A.

- Variability of Bourget's solution**
Soc. Therap. (June 3, 1923); through *J. pharm. Belg.*, 5 (1923), 646
Scoville, Wilbur L.
Preparation of isotonic solutions
J. Am. Pharm. Assoc., 12 (1923), 865

PHARMACOLOGY AND THERAPEUTICS.

- Bills, Charles E.
Comparison of the narcotic and toxic effects of six alcohols
J. Pharmacol. & Exp. Therap., 23 (1923), 49
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Drugs and basal metabolism
J. Pharmacol. & Exp. Therap., 22 (1923), 99
Broom, W. A., and Clark, A. J.
Standardization of ergot preparations
J. Pharmacol. & Exp. Therap., 22 (1923), 59
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Antirachitic properties of egg yolk
J. Am. Med. Assoc., 81 (1923), 818
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Anthelmintic value of carbon tetrachloride
J. Am. Med. Assoc., 81 (1923), 454
Gottlieb, R.
Pharmacological investigations of the stereoisomeric cocaine
Arch. exp. Pathol. Pharm., 97 (1923), 113; through *J. Soc. Chem. Ind.*, 42 (1923), 947A
Guy, Ruth A.
History of cod liver oil as a remedy
Am. J. Dis. Children (August 1923); through *Am. J. Pharm.*, 95 (1923), 764
Irvine, James C.
Biological and chemical significance of gamma sugar
Ind. & Eng. Chem., 15 (1922), 1162
Macht, David I.
Pharmacodynamic analysis of cerebral effects of atropine, homatropine, scopolamine and related drugs
J. Pharmacol. & Exp. Therap., 22 (1923), 35

- Macht, David I.
Absorption of drugs through the eye, ear, teeth and esophagus
J. Pharmacol. & Exp. Therap., 22 (1923), 123
- Mandelbaum, M.
Haemolytic and toxic properties of aphrogen, a new saponin
Chem.-Ztg. (1923), 71; through *Südd. Apoth.-Ztg.*, 63 (1923), 331
- Rheinboldt
Pepper taste of piperine
Ber. deutsch. chem. Ges., 56 (1923), 1228; through *J. Soc. Chem. Ind.*, 42 (1923), 625A
- Staudinger, H., Schneider, H., and Müller, F.
Relation of constitution to pepper taste
Ber. deutsch. chem. Ges., 56 (1923), 699 and 711
- Tiffeneau, M., and Dorlencourt, H.
Aryldialkylglycols, a new series of hypnotics
Compt. rend. acad. sci., 176 (1923), 1343; through *J. Soc. Chem. Ind.*, 42 (1923), 625A
- White, J. S.
Physiological standardization
Analyst, 48 (1923), 303
- GENERAL BOTANY AND BACTERIOLOGY.**
- Fowler, G. J., and Dinanath, T.
Changes in the fruit of Bassia longifolia after it is gathered
J. Ind. Inst. Sci., 6 (1923), 131; through *J. Soc. Chem. Ind.*, 42 (1923), 986A
- Girard, René
The herbs of St. John
Bull. Soc. Pharm. Bordeaux, 61 (1923), 179
- Pittenger, Paul S.
Pneumococcus antibody solution
Pract. Drug., 41 (Oct. 1923), 22
- Van Laren, A. J.
Cultivation of Artemisia cina Berg
Pharm. Weekbl., 60 (1923), 1088
- VEGETABLE AND ANIMAL DRUGS.**
- Ducloux, E. H., and Awschalom, M.
Composition of the bark of Rapanea laetevirens, Mez.
Anal. Asoc. Quim. Argentina, 11 (1923), 6; through *J. Soc. Chem. Ind.*, 42 (1923), 997A
- Dudley, H. W.
Purification of insulin
Biochem. J., 17 (1923), 376
- Grönberg, John
Studies on the deterioration of digitalis
Pharm. Zentralh., 64 (1923), 403
- Hocking, F. A.
Insulin
Pharm. J., 111 (1923), 392
- Laxa, O.
Determination of proteins in honey
Ann. Falsif., 16 (1923), 286; through *J. Soc. Chem. Ind.*, 42 (1923), 992A
- McGill, William J., and Wagener, Leonard R.
Electrometric assay methods for crude drugs
J. AM. PHARM. ASSOC., 12 (1923), 853
- Schouten, D. E.
Insulin in fishes
Nederl. Tijdschr. v. Geneesk. (May 19, 1923), 2118; through *Pharm. J.*, 111 (1923), 420
- Semenovitsch, V. A.
Cadaverine content of aqueous extract of autolysed pancreatic glands
J. Russ. Phys.-Chem. Soc., 49 (1917-1918), 608; through *J. Soc. Chem. Ind.*, 42 (1923), 624A
- Weibelitz, H.
Peru balsam
Pharm. Weekbl., 60 (1923), 1129
- Windaus, A., and Bandte, G.
Digitalis verum
Ber. deutsch. chem. Ges., 56 (1923), 2001
- ALKALOIDS AND GLUCOSIDES.**
- Bridel, M.
Monotropein, a new glucoside from Monotropa hypopitys, L.
Compt. rend. acad. sci., 176 (1923), 1742; through *J. Soc. Chem. Ind.*, 42 (1923), 739A
- Cole, H. I.
Potassium ferrocyanide as a microchemical reagent for alkaloids
Philippine J. Sci., 23 (1923), 97; through *J. Soc. Chem. Ind.*, 42 (1923), 997A
- DeJong
Determination of benzoyl ecgonine, tropacaine and ecgonine in coca leaves
Ber. Kol. Inst. Amsterdam, No. 15 (1923); through *Pharm. Ztg.*, 68 (1923), 740
- Pater, B.
Alkaloidal content of mildewed hyoscyamus leaves
Pharm. Monatsch., No. 5 (1923); through *Pharm. Ztg.*, 68 (1923), 740
- Pater B.
Alkaloidal content of stramonium at different periods of growth
Pharm. Monatsh., No. 5 (1923), through *Pharm. Ztg.*, 68 (1923), 739
- Schamelhout, A.
Scillarene, the active principle of squill
J. Pharm. Belg., 5 (1923), 694

- Stuber, B., Russmann, A., and Proebsting, E. A.
- Chemical method for the detection of adrenalin**
- Ztschr. ges. exp. Med.*, 32 (1923), 448; through *J. Soc. Chem. Ind.*, 42 (1923), 739A
- Tanret, Georges
- Derivatives of pseudopelletierine of the tropococaine type**
- Compt. rend. acad. sci.* (June 4, 1923); through *Répert. pharm.*, 35 (1923), 289.
- OILS, FATS AND WAXES.**
- Desai, R. D., Sudborough, J. J., and Watson, H. E.
- Oil from the seeds of Pongamia glabra**
- J. Ind. Inst. Sci.*, 6 (1923), 93; through *J. Soc. Chem. Ind.*, 42 (1923), 987A
- Ehrenstein, R., and Stuewer, H.
- Arachidic, isobehenic and n-licosanic acids**
- J. prakt. Chem.*, 105 (1923), 199; through *J. Soc. Chem. Ind.*, 42 (1923), 1031A
- Heiduschka, A., and Steinruck, A.
- Contribution to the chemistry of horse fat**
- J. prakt. Chem.*, 102 (1921), 241; through *Sudd. Apoth.-Ztg.*, 63 (1923), 331
- Hutton, H. W.
- Production of a water-soluble oil**
- J. Soc. Chem. Ind.*, 42 (1923), 988A
- Koss, A. S.
- Reactions of sulfuric and nitric acids with vegetable oils**
- Przemysl Chem.*, 4 (1920), 161; through *J. Soc. Chem. Ind.*, 42 (1923), 611A
- Patel, C. K., Sudborough, J. J., and Watson, H. E.
- Oil from the seeds of Anacardium occidentale**
- J. Ind. Inst. Sci.*, 6 (1923), 111; through *J. Soc. Chem. Ind.*, 42 (1923), 987A
- Pomerang
- Introduction of sulphur into oils, especially fish oils**
- Chem. Umschau*, 30 (1923), 133; through *Pharm. Zentralh.*, 64 (1923), 408
- Read, Bernard E.
- Fatty oils of the chaulmoogric acid series**
- Pharm. J.*, 111 (1923), 412
- Rhodes, F. H., and Van Wirt, A. E.
- Effect of pigments on the rate of oxidation of linseed oil**
- Ind. & Eng. Chem.*, 15 (1923), 1135
- Stocks, H. B.
- Test for distinguishing castor oil from other oils**
- Pharm. J.*, 111 (1923), 399
- Takahashi, K., and Kawakami, K.
- Isolation of vitamine-A from cod liver oil**
- J. Chem. Soc. Japan*, 44 (1923), 590; through *Pharm. J.*, 111 (1923), 420
- ESSENTIAL OILS.**
- Editorial
- Solid synthetic menthol**
- Perf. & Ess. Oil Rec.*, 14 (1923), 375
- Adams, M.
- Ethereal oils obtained from plants growing wild**
- Chem.-Ztg.* (1922), 935; through *Sudd. Apoth.-Ztg.*, 63 (1923), 331
- Bennett, C. T., and Garratt, D. C.
- Detection of esters of fixed acids in essential oils**
- Perf. & Ess. Oil Rec.*, 14 (1923), 359
- Lewisohn, Arthur
- Technical methods for the manufacture of synthetic perfumes**
- Perf. & Ess. Oil Rec.*, 14 (1923), 360
- Pigulevskij, G. V. et al.
- Russian essential oils**
- J. Russ. Phys.-Chem. Soc.*, 51 (1920), 60; through *J. Soc. Chem. Ind.*, 42 (1923), 627A
- Read, John, and Smith, Henry G.
- Extraction of piperitone essential oils**
- J. Soc. Chem. Ind.*, 42 (1923), 339T
- Rochussen, F.
- New constituents of camphor oil**
- J. prakt. Chem.*, 105 (1922), 120; through *J. Soc. Chem. Ind.*, 42 (1923), 1043A
- Smith, H. G., Hurst, E., and Read, J.
- Phellandrenes**
- J. Chem. Soc.*, 123 (1923), 1657
- MISCELLANEOUS PLANT CONSTITUENTS.**
- Berczeller, L., and Freud, J.
- Action of halogens on diastases**
- Biochem. Ztschr.*, 139 (1923), 746; through *J. Soc. Chem. Ind.*, 42 (1923), 993A
- Franzen, H., and Ostertag, R.
- Occurrence of succinic acid in plants**
- Biochem. Ztschr.*, 136 (1923); through *Pharm. Ztg.*, 68 (1923), 756
- Franzen, H., and Kaiser, H.
- Acids of tamarind precipitated by lead acetate**
- Ztschr. physiol. Chem.*, 129 (1923), 80; through *J. Soc. Chem. Ind.*, 42 (1923), 947A
- Kariyone, T., and Atsumi, K.
- Constituents of derris root**
- J. Pharm. Soc. Japan*, No. 491 (1923), 10
- Kunz-Krause
- Dextrinosol**
- Ber. deutsch. pharm. Ges.*, 33 (1923), 149

- Massatsch, C.
Adulteration of santonin
Pharm. Ztg., 68 (1923), 765
- Mathieu, L.
Determination of catalytic power of enzymes
Bull. Assoc. Chim. Sucr., 40 (1923), 423; through *J. Soc. Chem. Ind.*, 42 (1923), 993A
- Rao, M. G. S., and Iyengar, M. S.
4-Methoxyresorcyl aldehyde from the roots of Decalepis Hamiltonii
Perf. & Esss. Oil Rec., 14 (1923), 300
- Tempus, F.
Quantitative determination of starch
Naturprodukte (1923), 52; through *J. Soc. Chem. Ind.*, 42 (1923), 992A
- GENERAL AND PHYSICAL CHEMISTRY.**
- Arny, H. V., and Taub Abraham
Standard colored fluids and some official colorimetric tests
J. Am. Pharm. Assoc., 12 (1923), 839
- Durand, J. F., and Bailey, K. C.
Reaction between ferric salts and alkali thiocyanates
Bull. Soc. Chim., 33 (1923), 654; through *J. Soc. Chem. Ind.*, 42 (1923), 770A
- Caseneuve, M.
New reaction of resorcinol and its applications to the detection of nitroprussiates and ammonia
Bull. Soc. Pharm. Bordeaux, 61 (1923), 153
- Feigel, F.
Alteration of thiosulphate solution on aging
Ber. deutsch. chem. Ges., 56 (1923), 2086
- von Euler, H., and Erikson, E.
Adsorptive power of aluminum hydroxide
Ztschr. physiol. Chem., 128 (1923), 1; through *J. Soc. Chem. Ind.*, 42 (1923), 655A
- Gillet, C.
Acid reaction of ammonium salts to litmus
Bull. Soc. Chim. Belg., 32 (1923), 178; through *J. Soc. Chem. Ind.*, 42 (1923), 654A
- Huerre, R.
Transformation of amorphous sulphur in the preparation of precipitated sulphur
J. pharm. et chim., 28 (1923), 223
- Jacobson, C. A.
Maximum concentration of hydrofluosilicic acid at room temperature
J. Phys. Chem., 27 (1923), 577; through *J. Soc. Chem. Ind.*, 42 (1923), 768A
- Karczag, L., and Bodó, R.
Carbinols as indicators
Biochem. Ztschr., 139 (1923), 342; through *J. Soc. Chem. Ind.*, 42 (1923), 1000A
- LeBlanc, M., and Rühle, C.
Different modifications of sulphur dioxide
Chem. Zentr., 94 (1923), 522; through *J. Soc. Chem. Ind.*, 42 (1923), 972A
- Levi, G. R.
Chlorites of mercury and other metals
Gazz. Chim. Ital., 53 (1923), 245; through *J. Soc. Chem. Ind.*, 42 (1923), 716A
- Prideaux, E. B. R.
Structure of the halides and oxides of the 5th, 6th, and 7th groups
J. Soc. Chem. Ind., 42 (1923), 672
- Reisenleitner, A.
New indicator for use in acidimetry
Chem.-Ztg. (August 1923); through *J. pharm. Belg.*, 5 (1923), 678
- Robert C. C.
Formula for determining the normality of sulphuric acid solution from specific gravity
Analyst, 48 (1923), 381
- Thomas, Arthur W., and Johnson, Lucille
Mechanism of the mutual precipitation of certain hydrosols
J. Am. Chem. Soc., 45 (1923), 2532
- INORGANIC CHEMICALS.**
- Austin, Frederick J.
Method for the rapid determination of total phosphorus in phosphorus pastes
J. Am. Pharm. Assoc., 12 (1923), 857
- Blankart, A.
Analysis of peroxides and per salts
Helv. Chim. Acta, 6 (1923), 233; through *J. pharm. Belg.*, 5 (1923), 693
- Caille, and Viel, E.
Detection of antimony and bismuth in biological fluids
Compt. rend. acad. sci., 176 (1923), 1759; through *J. Soc. Chem. Ind.*, 42 (1923), 747A
- Cuny, L., and Poirot, G.
Colorimetric determination of small quantities of bismuth
J. pharm. et chim., 28 (1923), 215
- Evans, B. S.
Extension of Reinsch test for arsenic to bismuth
Analyst, 48 (1923), 357
- Faurholt, C.
Detection of nitric acid with ferrous sulphate
Ber. deutsch. chem. Ges., 56 (1923), 337
- Chigliotto
Influence of organic sulphides on the detection of mercury and arsenic
Repert. pharm., 35 (1923), 289

- Hackl, O.
Sensitivity of the silver nitrate reaction for sulphites
Chem.-Ztg., 47 (1923), 466; through *J. Soc. Chem. Ind.*, 42 (1923), 715A
- Ivanov, V. N.
New method for the detection and estimation of rhodium
J. Russ. Phys.-Chem. Soc., 49 (1917-1918), 601; through *J. Soc. Chem. Ind.*, 42 (1923), 632A
- Jacob, Kenneth D.
Determination of nitrate nitrogen in presence of cyanamide
Ind. & Eng. Chem., 15 (1923), 1175
- Kuhn, R.
Micro-determination of phosphoric acid
Ztschr. physiol. Chem., 129 (1923); through *J. Soc. Chem. Ind.*, 42 (1923), 955A
- Lassieur, A.
Electrolytic estimation of antimony
Compt. rend. acad. sci., 177 (1923), 263; through *J. Soc. Chem. Ind.*, 42 (1923), 955A
- LeBlanc, M., and Zellmann, R.
Preparation of per-salts
Ztschr. Elektrochem., 29 (1923), 192; through *J. Soc. Chem. Ind.*, 42 (1923), 603A
- Mellet, R.
Analysis of alkali phosphotungstates
Helv. Chim. Acta, 6 (1923), 656; through *J. Soc. Chem. Ind.*, 42 (1923), 769A
- Miller, J.
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- Monier-Williams, G. W.
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- Ochi, S.
Chemical constitution of bleaching powder
J. Chem. Ind. Japan, 26 (1923), 1; through *J. Soc. Chem. Ind.*, 42 (1923), 603A
- Ochi, S.
Determination of available chlorine in bleaching powder
J. Chem. Ind. Japan, 26 (1923), 185; through *J. Soc. Chem. Ind.*, 42 (1923), 715A
- Roth, H.
Determination of boric acid by the Höning-Spitz method
Naturprodukte (1923), 134; through *J. Soc. Chem. Ind.*, 42 (1923), 972A
- Schlundt, H.
Extraction of mesothorium from monazite sand
Chem. News, 127 (1923), 139 and 153; through *J. Soc. Chem. Ind.*, 23 (1923), 947
- Smith, R. B., and Giesy, P. M.
Titration of ferric chloride with sodium hydroxide using the oxygen electrode
J. Am. Pharm. Assoc., 12 (1923), 855
- Wada, I., and Ato, S.
Detection and separation of indium
Nippon Kwagaku Kwai Shi, 44 (1923), 1; through *J. Soc. Chem. Ind.*, 42 (1923), 632A
- Waeser, B.
Production of silver nitrate
Chem. Zentr., 94 (1923), 1079; through *J. Soc. Chem. Ind.*, 42 (1923), 655A

ORGANIC CHEMICALS.

- Beal, G. D.
Preparation of acid-fast caramel
J. Am. Pharm. Assoc., 12 (1923), 850
- Beyer, O.
Determination of p-sulphaminobenzoic acid in saccharin
Chem.-Ztg., 47 (1923), 744; through *J. Soc. Chem. Ind.*, 42 (1923), 1043A
- Binz, A.
Decomposition of neo-silversalvarsan
Klin. Wchnschr. (1923), 259; through *Pharm. Weekbl.*, 60 (1923), 1094
- Bishop, Wilfrid B. S.
Ethyl formate from oxalic acid, glycerol and ethyl alcohol
J. Soc. Chem. Ind., 42 (1923), 401T
- Blok, C. J.
Chlorine of antiformin
Pharm. Weekbl., 60 (1923), 1131
- Debuquet, L.
Combination of hexamethylenetetramine with trichloracetic acid
J. pharm. et chim., 28 (1923), 263
- Denigès, G.
Detection of very small quantities of acetyl-salicylic acid
Bull. Soc. Pharm. Bordeaux, 61 (1923), 143
- Dietze, F.
Auto-oxidation of ether
Australas. J. Pharm. (June 20, 1923); through *Repert. pharm.*, 35 (1923), 310
- Fabre, R.
Some combinations of xanthydrolic acid
Bull. Soc. Chim., 33 (1923), 791; through *J. pharm. Belg.*, 5 (1923), 677

- Fosse, R., and Hieulle, A.
- Xanthyl derivatives of allophanic acid, thiosinamine and allanton**
- Compt. rend. acad. sci.*, 176 (1923), 1719; through *J. Soc. Chem. Ind.*, 42 (1923), 740A
- Gerasimov, A. F.
- Collargol**
- J. Russ. Phys.-Chem. Soc.*, 49 (1917-1918), 604; through *J. Soc. Chem. Ind.*, 42 (1923), 626A
- Fischer, W. M.
- Detection of hydroxylamine**
- Chem.-Ztg.*, 47 (1923), 401; through *J. Soc. Chem. Ind.*, 42 (1923), 626A
- Hanson, A. W.
- Determination of novocaine**
- J. Assoc. Off. Agric. Chem.*, 7 (1923), 17
- Hanson, A. W.
- Determination of pyramidone**
- J. Assoc. Off. Agric. Chem.*, 7 (1923), 29
- Herissey, H., and Delaunay, P.
- Detection and identification of small quantities of vanillin**
- J. pharm. et chim.*, 28 (1923), 257
- Hinton, C. L.
- Idometric determination of sugars**
- Pharm. J.*, 111 (1923), 399
- Hirschel, W. N., and Verhoeft, J. A.
- Characteristic reaction for hydroxylamine**
- Chem. Weekbl.*, 20 (1923), 319; through *J. Soc. Chem. Ind.*, 42 (1923), 742A
- Khouri, J.
- Determination of small quantities of oxalic acid**
- Ann. Chim. Analyt.*, 5 (1923), 205; through *J. Soc. Chem. Ind.*, 42 (1923), 997A
- Kunz-Krause, H.
- Distinction between α -naphthol and β -naphthol**
- Chem.-Ztg.* (July 1923); through *J. pharm. Belg.*, 5 (1923), 679
- Levi, T. G.
- Dithioformic acid**
- Atti Real. Acad. Lin.*, 32 (1923), 569; through *J. Soc. Chem. Ind.*, 42 (1923), 997A
- Lowe, Carroll H., and James, C.
- Preparation of diphenyl**
- J. Am. Chem. Soc.*, 45 (1923), 2666
- Marvel, C. S., and Smith, F. E.
- Identification of amines**
- J. Am. Chem. Soc.*, 45 (1923), 2696.
- McElvain, S. M., and Adams, Roger
- Synthesis of a new bicyclic nitrogen ring**
- J. Am. Chem. Soc.*, 45 (1923), 2738
- McKee, R. H., and Burke, S. P.
- Conversion of methyl chloride into methyl alcohol**
- Ind. & Eng. Chem.*, 15 (1923), 788
- Meurice, R.
- Detection of methyl alcohol in ethyl alcohol**
- Ann. Chim. Analyt.*, 5 (1923), 204; through *J. Soc. Chem. Ind.*, 42 (1923), 997A
- Müller, W.
- Colorimetric determination of higher alcohols in spirits**
- Mitt. Lebensmittelunters. Hyg.*, 14 (1923), 103; through *J. Soc. Chem. Ind.*, 42 (1923), 994A
- Moraw, H. O.
- Examination of medicinal methylene blue**
- J. Assoc. Off. Agric. Chem.*, 7 (1923), 20
- Pervier, Norville C., and Gortner, Ross A.
- Estimation of pentoses and pentosans**
- Ind. & Eng. Chem.*, 15 (1923), 1167
- Phillips, S. B.
- Determination of purity of vanillin**
- Analyst*, 48 (1923), 367
- Poore, H. D.
- Effect of dialysis on direct crystallization of citric acid**
- Ind. & Eng. Chem.*, 15 (1923), 775
- Powell, S. G.
- Beta-phenoxypropionic acid and derivatives**
- J. Am. Chem. Soc.*, 45 (1923), 2708
- Rabak, W.
- Determination of phenylcinchoninic acids**
- J. Assoc. Off. Agric. Chem.*, 7 (1923), 32
- Remy, E.
- Quantitative estimation of neosalvarsan**
- Biochem. Ztschr.*, 137 (1923), 133; through *J. Soc. Chem. Ind.*, 42 (1923), 625A
- Richard, F.
- Testing of petrolatum, liquid petrolatum, paraffin and petroleum ether**
- J. pharm. et chim.*, 28 (1923), 209
- Rose, Edward S.
- Review of methods for determining acetanilid**
- Am. J. Pharm.*, 95 (1923), 743
- Rupe, and Sulger
- Camphor from campholic acid**
- Perf. & Ess. Oil Rec.*, 14 (1923), 378
- Schamelhout, A.
- Pharmacopœial monograph for sodium lactate**
- J. pharm. Belg.*, 5 (1923), 685
- Schwarz, P.
- Estimation of alcohol in benzene**
- Chem.-Ztg.*, 47 (1923), 462; through *J. Soc. Chem. Ind.*, 42 (1923), 706A
- Tomecko, C. G., and Adams, Roger
- Allyl ethers of various carbohydrates**
- J. Am. Chem. Soc.*, 45 (1923), 2698
- Walton, James H., and Withrow, Lloyd L.
- New method for the determination of acetic acid in acetic anhydride**
- J. Am. Chem. Soc.*, 45 (1923), 2689

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Synthesis of vanillin by the ozone process <i>Chem. & Met. Eng.</i> , 28 (1923), 806; through <i>J. Soc. Chem. Ind.</i> , 42 (1923), 625A	CLINICAL AND DIAGNOSTIC METHODS.
Zerner, E.	Malgoyre, J.
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GOVERNMENT STANDARDS FOR SPICES.

COMPILED BY EARL B. PUTT AND HARVEY A. SEIL.*

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Capsicum, U. S. P.	Marjoram.	Spanish Paprika.
Caraway Seed, U. S. P.	Black Mustard, U. S. P.	Black Pepper, U. S. P.
Cardamom Seed, U. S. P.	Mustard Flour.	Cayenne Pepper, U. S. P.
Celery Seed, N. F.	French Mustard.	Red Pepper.
Chillies (Bombay, African, Indian, Talay, Cherries).	German Mustard.	White Pepper.
Cinnamon (Cassia, Ground Cassia, Ceylon and Saigon, U. S. P.)	Ground Mustard.	Pimenton (Pimiento, Span- ish Paprika).
Cloves, U. S. P.	Mustard Paste.	Poppy Seed.
Coriander Seed, U. S. P.	Prepared Mustard.	Saffron, N. F.
Cumin Seed.	White Mustard, U. S. P.	Sage.
Dill Seed.	Nutmeg, U. S. P.	Star Anise.
Fennel Seed, U. S. P.	Paprika.	Thyme, N. F.
	Hungarian Paprika (Rosen-)	

ALLSPICE, Pimenta, N. F.†—N. F. Requirements: Not more than 5% stems or other foreign matter, crude fiber not over 25%, ash not more than 6%.

Department of Agriculture requirements: Not less than 8% of quercitannic acid, not more than 25% crude fiber, not over 6% total ash, not more than 0.4% of ash insoluble in hydrochloric acid. (*Circular* 136.)

ANISE, Aniseed, U. S. P.†—U. S. P. Requirements: Not more than 3% of foreign seeds or other vegetable matter. Not more than 9% ash.

Department of Agriculture requirements: Not more than 9% ash, not more than 1.5% ash insoluble in hydrochloric acid, not more than 3% foreign matter. (*Circular* 136.)

CAPSICUMS, U. S. P., Cayenne Peppers, African Chillies.—U. S. P. requirements: Not more than 2% of stems, calyxes or other foreign matter, not less than 15% of non-volatile ether extract, not more than 7% ash, not more than 1% ash insoluble in hydrochloric acid.

* Formerly Experts, U. S. Dept. of Agriculture.

† NOTE.—The initials "N. F." following a name indicate that the article is official in the National Formulary, one of the official standards of the Food & Drugs Act.

Articles marked "U. S. P." are official drugs of the United States Pharmacopoeia, Ninth Revision, which is also a legal standard under the Food and Drugs Act.

Where no qualifying mark thus identifies a spice in the above list, it is not official either in the National Formulary or the United States Pharmacopoeia and the standard given is only that established by the Department of Agriculture. It should be noted, however, that standards established by the Department of Agriculture, when authorized as they usually are by the Secretary of Agriculture, have the same legal basis as the more formal requirements of the United States Pharmacopoeia and National Formulary.