

Pharmacy
A/B
R195

AWPB
R195
1938

DATES OF FIRST PREPARATION

OF

THE CHEMICALS AND

PREPARATION OF CHEMICALS OF THE

UNITED STATES PHARMACOPOEIA

AND

THE NATIONAL FORMULARY

BY

STANLEY ALFRED RAZNER



A THESIS SUBMITTED FOR THE DEGREE OF

BACHELOR OF SCIENCE

(PHARMACY)

UNIVERSITY OF WISCONSIN

1938

Ancient

Nitric acid was known to the ancient alchemists as "Aqua fortis". It was prepared by Geber, in the eight century, by distilling a mixture of niter, blue vitriol, and alum.

Felter & Lloyd, King's American Dispensatory. v.1, p.67

Ancient

Calcium hydroxide has been known since ancient times.

Wood-LaWall, U. S. Dispensatory. 19th ed. p.630

Ancient

Ammonium chloride was first prepared in Egypt from the soot of camel dung by sublimation.

Felter & Lloyd, King's American Dispensatory. v.1, p.177

Potassium carbonate was made in olden days by incinerating sea-shore plants ("barilla"). A better method was first worked in England by Muspratt in 1824.

Hilditch, A Concise History of Chemistry. p.167

Ancient

Lime has been known since ancient times, however in 1808, Davy showed that lime was an oxide of calcium.

Felter & Lloyd, King's American Dispensatory. v.1, p.407

Ancient

Prepared chalk has been used since ancient times.

Stille and Maisch, The National Dispensatory. 3 ed. p.516

Ancient

Sodium chloride has been known and employed as an indispensable seasoner of food since the very origin of the human race.

King's American Dispensatory. v.2, p.1778

Ancient

Glucose or dextrose was discovered in very early times but it was synthesized in 1890 by E. Fischer.

Hilditch, A Concise History of Chemistry. p.154

Ancient

Sublimed sulfur has been known since ancient times.

King's American Dispensatory. v.2, p.1861

Ancient

Die enthaarte Haut glättete man dann durch Reiben mit Pumex Catinensis, Birnsstein von Catina auf Sizilien.

Schelenz, Geschichte der Pharmazie. p.143

Ancient

Lead monoxide, is also called litharge, a word used since ancient times, and derived from the two Greek words, lithos, a stone, and arguros, silver. It is so called because the ancients discovered that when the ore, crude litharge, was fused, the pure litharge, freed from the mineral impurities, fused in the form of bright, shiny, silvery scales.

Army, Principles of Pharmacy. p.165

Ancient

Menthol was introduced early (from Japan). It was synthesized in 1897 by Bechmann from menthone.

Hilditch, A Concise History of Chemistry. p.149

Ancient

Alum has been made for centuries from certain ores of aluminum, particularly alum shale.

Army, Principles of Pharmacy. 4th ed. p.547

Ancient

Tin was known in the metallic state as early as the time of Moses.

Gmelin, Hand-Book of Chemistry. v.5, p.66

Ancient

Sucrose or cane sugar was known to the ancients. It was originally obtained from India, where it was extracted from the sugar cane.

Wood-LaWall, U.S. Dispensatory. 27th ed. p.1047

Ancient

Sodium carbonate, or soda, has been known since the earliest times. It was not originally distinguished from potash, both being designated by the term nitrum.

Duhamel, in 1736, and Marggraf, in 1759, were the first to draw a sharp distinction between the two.

Sadtler & Coblentz, Pharmaceutical & Med. Chem. 6th ed. p.250

Ancient

Sodium borate was known to the ancients and to the alchemists. Its true chemical character was not understood until 1747, when Baron pointed out the fact that it consisted of boric acid (then called sedative salt) and soda.

Sadtler & Coblentz, Pharm. & Med. Chem. 6th ed. p.247

Ancient

Knives and arms of iron are mentioned in the books of Moses.

Gmelin, Hand-Book of Chemistry. v. 5, p.182

315 B.C.

Quicksilver is first alluded to in Greek writings by Theophrastus, but it was certainly known and used medicinally by the Chinese and in India long before.

Wootton, Chronicles of Pharmacy. v.1, p.408

60 A.D.

Dioscorides in his Materia Medica shows how to prepare mercury (hydrargyros) by subliming cinnabar and charcoal in an iron pot, also acetate of lead, sulfate of copper, and quicklime from limestone.

Grier, A History of Pharmacy. p.125

8 c A.D.

Sulfurated potash was known as early as the eight century. The name "hepar sulphuris-liver of sulphur", was given it by the celebrated monk, Basil Valentine.

King's American Dispensatory. v. 2, p.1543

8 c A.D.

Silver nitrate was first obtained in the crystalline form by Geber, in the eight century.

Sadtler & Coblentz, Pharm. & Med. Chem. 6th ed. p.309

8 c A.D.

Arsenic trioxide was known to Geber, being prepared through the ignition of arsenic trisulphide.

Sadtler & Coblentz, Pharm. & Med. Chem. 6th ed. p.164

LeWall, 4000 Years of Pharmacy, p.164

8 c A.D.

Potassium nitrate was known in the eighth century.

Sadtler & Coblentz, Pharm. & Med. Chem. 6th ed. p.225

the period of preparing such substances as saltpetre and mercury.

LeWall, 4000 Years of Pharmacy, p.164

8 c A.D.

Mercury bichloride was described by Geber.

Sadtler & Coblentz, Pharm. & Med. Chem. 6th ed. p.327

the name of vitriol could be traced further back than to Albertus Magnus.

Boston, Chronicles of Pharmacy, v.1, p.373

9 c A.D.

The art of abstracting alcohol from alcoholic beverages by distillation, was, in all probability, discovered by the Arabs.

Felter & Lloyd, King's Amer. Dispensatory. v.1, p.132

Calcium chloride was first prepared by James Hall in the fourteenth century. He designated it by the title of sal ammoniac fixum, because he prepared it by heating a mixture of sal ammoniac and lime.

1200 A.D.

Sulfuric acid was known to the Arabs who obtained it by the weathering and lixiviation of pyrites.

Grier, A History of Pharmacy. p.164

13 c A.D.

Lully is credited with the earliest description of the method of preparing ammonium carbonate.

LaWall, 4000 Years of Pharmacy. p.159

13 c A.D.

Lully is credited with the earliest description of the method of preparing red precipitate or red mercuric oxide.

LaWall, 4000 Years of Pharmacy. p.159

13 c A.D.

Lully is credited with the earliest description of the method of preparing white precipitate or ammoniated mercury.

LaWall, 4000 Years of Pharmacy. p.159

13 c A.D.

The name of vitriol cannot be traced further back than to Albertus Magnus.

Wootton, Chronicles of Pharmacy. v.1, p.373

14 c A.D.

Calcium chloride was first prepared by Isaac Hollen in the fourteenth century, who designated it by the title sal ammoniacum fixum, because he prepared it by heating a mixture of sal ammoniac and lime.

Sadtler & Coblentz, Pharm. & Med. Chem. 6th ed. p.266

1325

Ibn Batuta mentions "Java frankincense", which under the Arabian name became corrupted into Banjawi, Benjui, Benzui, Benzoë, and finally to Benzoin.

Lloyd, Origin & History of Drugs. v. 1, p.30

15 c A.D.

Das Auftreten von Aceton bei der Destillation des essigsäuren Bleis scheint schon im 15. Jahrhundert beobachtet zu sein.

Schmidt, Pharmaceutische Chemie. v.2, p.227

15 c A.D.

Under the name of white vitriol, zinc sulfate was known in the fifteenth century.

Sadtler & Coblentz, Pharm. & Med. Chem. 6th ed. p.298

16 c A.D.

The earliest known description of zinc as a metal is found in the treatise on minerals by paracelsus, and it is he who first designates the metal by the name familiar to us.

Wootton, Chronicles of Pharmacy. v.1, p.426

16 c A.D.

Benzoic acid was isolated by sublimation from benzoin, and (1709) from Peru balsam by Lehman.

Grier, A History of Pharmacy. p.181

16 c A.D.

Liban or Libavius discovered stannic chloride (spiritus fumans Libavius).

Grier, A History of Pharmacy. p.132

1517

Valerius Cordus is said to have first prepared ether.

Grier, A History of Pharmacy. p.190

1540

The preparation of ether from alcohol and sulfuric acid was first described by Valerius Cordus, and the method of making this 'oleum vitrioli dulce' was published in 1552 by Conrad Gessner. Frobenius, 1730, named it sulfuric ether, now called ethyl oxide.

Thorpe, Dictionary of Applied Chemistry. v.2, p.24

1546

Bismuth was first mentioned under that name by Agricola, in "De Natura Fossilium".

Wootton, Chronicles of Pharmacy. v.1, p.386

1550

Succinic acid was isolated by Agricola by the distillation of amber.

Grier, A History of Pharmacy. p.181

1597

Carbonic acid gas (the so-called carbonic acid) was observed in mineral waters as early as 1597, by Libavius, who regarded it as a volatile spirit; Von Helmont called it gas sylvestre; Hoffman, who noticed its acid properties in natural combination in mineral waters, named it mineral spirit; Lavoisier in 1775 determined its composition.

Felter & Lloyd, King's Amer. Dispensatory. v.1, p. 43

Felter & Lloyd, King's Amer. Dispensatory, v.1, 17 c A.D.

Stearic acid was isolated by Taschenius.

Grier, A History of Pharmacy. p.181

Journal of Pharmacy, v.7, 1823, p.14 17 c A.D.

Christopher Glaser, was one of the independent discoverers and users of potassium sulfate as a remedy.

LaWall, 4000 Years of Pharmacy. p.302

Grier, A History of Pharmacy, p.181 17 c A.D.

Ammonium acetate was prepared by Raymond Minderer.

Grier, A History of Pharmacy. p.182

Journal of Pharmacy, v.7, 1823, p.14 1609

Oswald Crollius publishes Basilica Chemica, containing the earliest recorded method of making calomel.

LaWall, 4000 Years of Pharmacy. p.570

1610

Potassium acetate first made; called "Terra Folia Tartrata".

LaWall, 4000 Years of Pharmacy. p.570

1631

Mynsicht prepared antimony and potassium tartrate from crocus of antimony and cream of tartar.

Felter & Lloyd, King's Amer. Dispensatory. v.1, p.213

1648

Acetate of zinc was first described by Glauber.

Journal of Pharmacy. v.7, 1835, p.14

1648

Glauber prepared hydrochloric acid by distilling salt (sodium chloride) with oil of vitriol and named it spirit of salt (Spiritus Salis Marini, Glauberi).

Grier, A History of Pharmacy. p.165

1648

Sodium sulfate or Glauber's salt, as the name indicates, was first prepared by Glauber, who obtained it as a residue in the retort on distilling marine salt with oil of vitriol in the process of preparing the spirit of salt which he discovered.

Grier, A History of Pharmacy. p.182

1659

Potassium permanganate was produced by Glauber, while fusing together caustic potash and black oxide of manganese.

Felter & Lloyd, King's Amer. Dispensatory. v.2, p.1575

1661

Methyl alcohol was first isolated by Boyle from the products of the destructive distillation of wood.

Grier, A History of Pharmacy. p.193

1668

Brandt, an alchemist of Hamburg, during his quest for a substance which would turn base metals into gold, accidentally discovered phosphorus while distilling a mixture of sand and concentrated urine.

Grier, A History of Pharmacy. p.133

1672

Peter Seignette, an apothecary of Rochelle, produced by accident the double tartrate of sodium and potassium known as sel seignette or rochelle salt.

Grier, A History of Pharmacy. p.181

1681

Coal tar was discovered by J.J. Becher, a German chemist. An English patent was granted in 1681 to J. J. Becher and Henry Serle for making coal tar.

Lunge, Coal Tar and Ammonia. p.10

Bohn discovered sodium nitrate.

Sadtler & Coblentz, Pharm. & Med. Chem. 6th ed. p.243

1693

Phosphoric acid was discovered by Boyle and investigated by Marggraf, Scheele and Gahn.

Hilditch, A Concise History of Chemistry. p.67

1694

Magnesium sulfate, commonly known as Epsom Salt, was discovered by Nehemias Grew, who prepared it from the saline waters of Epsom, in England, from whence it has derived its familiar name Epsom Salt.

Felter & Lloyd, King's Amer. Dispensatory. v.2, p.1222

1697

Stahl in 1697 differentiated sulfur dioxide or sulphurous acid from oil of vitriol, and in 1775, sulfur dioxide was prepared pure, and investigated by Priestly.

Felter & Lloyd, King's Amer. Dispensatory. v.1, p.91

1701

Gab Testi aufs neue zur Bereitung und Anwendung des Milchzuckers Gelenkeit.

Taschenbuch für Scheidekünstler und Apotheker auf des Jahr 1801, v. 22, p.1

1702

Homborg discovered boracic acid in borax.

Gmelin, Hand-Book of Chemistry. v.2, p.95

1702

Boric acid had been known chemically from 1702, and was experimented with in 1848 by Binswanger, without its real value being discovered. It was first used on the recommendation of Pasteur in 1862, to prevent the decomposition of urine in the bladder.

Grier, A History of Pharmacy. p.157

1707

Valentin and Slevogt subsequently found the carbonate of magnesia, or magnesia alba, in the mother-liquor of saltpetre and in epsom salts.

Gmelin, Hand-Book of Chemistry. v.3, p.221

1712

The earliest instance of the use of the word kaolin (meaning in Chinese "high hill") is found in a letter from a French Jesuit missionary to China, the pere Dentrecolles who wrote from Jao-chau, the capital of the pottery district to the procureur of the order in Paris, giving a long and interesting account of the Chinese porcelain industry.

Amer. Druggist and Pharm. Record. v. 62, 1914, p.55

1719

Thymol was discovered by Caspar Neumann in 1719. It was purified, in 1853, by M. Lallemand, who gave it the name "thymol".

Fleter & Lloyd, King's Amer. Dispensatory. v.2, p.1937

1721

Precipitated sulphur was the synonym given to Lac Sulphuris in 1721 by the London Pharmacopoeia.

American Druggist. v.19-20, 1890-91, p.300

1736

Sodium acetate, formerly called Crystallized foliated earth of tartar, was first obtained by Duhamel.

Felter & Lloyd, King's Amer. Dispensatory. v.2, p.1763

1749

Formic acid was first obtained by the distillation of ants, by Samuel Fisher (Lavoisier).

Felter & Lloyd, King's Amer. Dispensatory. v. 1, p.49

1750

Zinc oxide was first given internally by Ganbuis.

Grier, A History of Pharmacy. p.135

1751

Nickel was discovered by Cronstadt.

Felter & Lloyd, King's Amer. Dispensatory. v.2, p.1310

1752

Macquer by boiling Prussian blue with caustic potash, was the first to obtain potassium ferrocyanide.

Felter & Lloyd, King's Amer. Dispensatory.v.2, p.1566

1752

Calaminaris lapis praeparatus.

Lapis Calaminaris ter candefactus toties extinguitur in Aqua Rosarum, postea super marmor laevigatus cum eadem aqua redigatur in pastillos.

Edinburg Pharmacopoeis. 1752, p.28

1755

Joseph Black of England, studied magnesium oxide and magnesium salts.

Deming, General Chemistry. p.616

1756

Ammonia was discovered in a state of solution by Black, in 1756, and in the pure gaseous condition by Priestley, in 1774.

Felter & Lloyd, King's Amer. Dispensatory. v.1, p.169

1757

Potassium bicarbonate was originally prepared by Cartheuser.

Felter & Lloyd, King's Amer. Dispensatory. v. 2, p.1547

1759

Ethyl chloride was discovered by Rouelle, and made by him by the action of sulfur chloride or metallic chlorides upon ethyl alcohol.

Wood-LaWall, U. S. Dispensatory. 22ed. p.86

1759

Ethyl acetate was discovered by Lauroguais.

Hilditch, A Concise History of Chemistry. p.127

1759

Count de Lauraguais obtained a crystallized acetic acid in a distillate of cuprum acetate, then known as "copper spirit". The name glacial acetic acid was affixed to this substance by Löwitz in 1793.

Felter & Lloyd, King's Amer. Dispensatory. v.1, p.20

1769

Scheele first prepared tartaric acid in 1769. Retzius, in 1770, produced it in a crystalline condition.

Felter & Lloyd, King's Amer. Dispensatory. v. 1, p.97

1771

Scheele discovered an impure hydrofluoric acid in 1771. It was subsequently obtained pure by Gay-Lussac and Thenard in 1808.

Felter & Lloyd, King's Amer. Dispensatory. v.1, p.62

1774

Oxygen was discovered almost simultaneously by Priestley and Scheele.

Wood-LaWall, U.S. Dispensatory. 22ed. p.805

1776

Citric acid was first obtained, in 1776, by Retzius who distinguished it from acetic and tartaric acids. In 1774, Scheele first obtained it in a crystalline form.

Felter & Lloyd, King's Amer. Dispensatory. v.1, p.47

1776

Oxalic acid was discovered by Scheele.

Felter & Lloyd, King's Amer. Dispensatory. v. 1, p.74

1776

Nitrous oxide was discovered by Priestley.

Felter & Lloyd, King's Amer. Dispensatory. v.2, p.1312

1779

The chief ore of barium is heavy spar (barium sulfate) which was called "barote" by Guyton de Morveau, from the Greek word baros (heavy), and from this the name of the element was derived.

Army, Principles of Pharmacy. 4th ed. p.529

1779

Glycerin was discovered by Scheele in the saponification products of olive oil by means of litharge. Chevreul gave it the name glycerin.

Felter & Lloyd, King's Amer. Dispensatory. v.2, p.933

Lactic acid was first obtained by Scheele from sour milk.

Felter & Lloyd, King's Amer. Dispensatory. v.1, p.64

Westerling obtained cinchotannic acid.

1782

Westerling obtained cinchotannic acid.

Grier, A History of Pharmacy. p.56

Scheele was discovered by four Dutch chemists, Scheele, van Troostwijk, Berzelius, and Lavoisier.

Westerling, Dictionary of Chemistry. v.2, p.558

1782

Scheele discovered diluted hydrocyanic acid.

Felter & Lloyd, King's American Dispen. v.1, p.59

Tannic acid was discovered and definitely distinguished from gallic acid by Scheele.

1785

Grier, A History of Pharmacy. p.141

Scheele first obtained gallic acid pure, and established its non-identity with tannic acid.

Felter & Lloyd, King's American Dispen. v.1, p.51

Lampadius discovered carbon dioxide accidentally, while heating iron pyrites with charcoal.

1786

Felter & Lloyd, King's Amer. Dispen. v.1, p.447

Pyrogallol was discovered by Scheele in 1786 from gallic acid.

Hilditch, A Concise History of Chemistry. p.126

Chronic acid (chromic acid) was discovered by Wenzelin (who also discovered chromic acid) and was first obtained by the sulfuric acid method by Fritzsche in 1786

1786

Potassium chlorate was prepared by Higgins.

Felter & Lloyd, King's Amer. Dispen. v.2, p.1559

19

1786

Bismuth subnitrate was introduced into the practice of medicine by Odier.

Sadtler & Coblentz, Pharm. & Med. Chem. 6th ed. p.363

1795

Ethylene was discovered by four Dutch chemists, Deiman, Paets van Troostwyk, Bondt, and Lauwerenburgh.

Watts, Dictionary of Chemistry. v.2, p.565

1795

Tannic acid was discovered and definitely distinguished from gallic by Seguin.

Grier, A History of Pharmacy. p.181

1796

Lampadius discovered carbon disulphide accidentally, while heating iron pyrites with charcoal.

Felter & Lloyd, King's Amer. Dispen. v.1, p.441

1797

Chromic acid (chromium trioxide) was discovered by Vauquelin (who also discovered chromium), and was first obtained by the sulfuric acid method by Fritzsche in 1839.

Felter & Lloyd, King's Amer. Dispen. v.1, p.45

1798

Chlorinated lime was first prepared on a commercial scale by Tennant, of Glasgow, by saturating slaked lime with chlorine.

Sadtler & Coblentz, Pharm. & Med. Chem. 6th ed. p.271

1798

Im Gazen bereitet
Creta praecipitata; Craie precipitee
Calcariae muriaticae
Kali cubcarbonici
(Du Wir Pharmacopoea Wirtembergica 1798)

Pharmacopoea Universalis. v.1, 1829, p.359

1799

Picric acid or trinitrophenol was discovered by Welter in the nitration of silk. In 1842 Laurent recognized it as a phenol.

Hilditch, A Concise History of Chemistry. p.126

1800

Sodium phosphate was introduced into practice by Pearson of London.

Wood-LaWall, U.S.Dispensatory. 22ed. p.1006

1801

Sodium bicarbonate was first prepared by Valentine Rose.

Sadtler & Coblentz, Pharm. & Med. Chem. 6th ed. p.254

1803

The oxides of cerium were discovered in 1803, simultaneously by Klaproth and by Hisinger and Berzelius.

Gmelin, Hand-Book of Chemistry. v.3, p.255

1803

Derosne, a French manufacturing chemist, produced from opium a crystalline salt, which was at first supposed to be the active ingredient, but which later was shown to be the substance now known as narcotine, and was so named by Robiquet in the belief that it was narcotic.

Grier, A History of Pharmacy. p.56-57

1806

Sertürner announced the discovery of "opium säure" (meconic acid) and in 1816 explained that it was combined with an alkaline base which he said shows much analogy with ammonia, and which he isolated in 1817 under the name "morphium".

Grier, A History of Pharmacy. p.57

1807

Lithium, the oxide of which was discovered in 1807 by Arfwerson, was first suggested as a remedy for gout by Dr. Ure in 1843.

Wootton, Chronicles of Pharmacy. v.1, p.353

1807

Sir H. Davy first obtained sodium.

Gmelin, Hand-Book of Chemistry. v.3, p.73

1808

Sir H. Davy discovered calcium.

Gmelin, Hand-Book of Chemistry. v.3, p.181

1808

Sir H. Davy first obtained the metal strontium from the native carbonate of strontia which was discovered in 1787 at Strontian.

Gmelin, Hand-Book of Chemistry. v.3, p.167

1808

Sir H. Davy first obtained barium in the free state.

Gmelin, Hand-Book of Chemistry. v.3, p.133

1809

The first formulas for zinc stearate were those of E. Fullerton Cook and P. C. Dosch.

Proceedings of the Penn. Pharm. Ass. 1909, p.340

1809

The name paraffin, often spelled paraffine, was first found in petroleum by Fuchs, but the name was originally bestowed by Baron von Reichenbach upon a waxy substance obtained through the destructive distillation of wood in 1830.

Wood-LaWall, U.S.Dispensatory. 22ed. p.811

1811

Cinchonine sulfate was discovered by Gometz.

Wood-LaWall, U.S.Dispensatory. 22 ed. p.342

1811

Courtois, French pharmacist, discovers iodine.

LaWall, 4000 Years of Pharmacy. p.580

1811

Gomez, of Lisbon, described a crystalline substance which Dr. Duncan, of Edinburgh, had obtained from certain species of cinchona, and gave to this product the name of cinchonine.

Wootton, Chronicles of Pharmacy. v.2, p.247

1813

L'iode se combine tres-bien avec la soude et la potasse; les acides l'en separent comme de ses combinaisons avec la plupart des autres oxides. Par M.B.Courtois.

Annales de Chimie et de Physique. s.l, v.88, p.309

1815

The name "Seidlitz powders" was first applied to the present preparation known by that name in 1815 when Thomas Field Savory of Bond Street, London, took out a patent for the combination of a neutral salt or powder which possesses all the properties of the medicinal spring of Seidlitz in Germany under the name of Seidlitz Powders.

A.H.Neumann, Thesis, Pulvis Effervescens Compositus 1915
British Patent N. 3954 A.D. 1815

1815

Gay-Lussac was the first to prepare ethyl iodide, producing it by distilling hydriodic acid and absolute alcohol, and setting the ether free with water.

Felter & Lloyd, King's Amer. Dispen. v.1, p.125

1816

Hypophosphorous acid and salts were isolated by Dulong.

Hilditch, A Concise History of Chemistry. p.76

1816

Morphine, the first alkaloid identified was discovered and its alkaline quality made known by Sertürner a Hanoverian chemist, though Derosne and Seguin, two French chemists, had separated it, as well as narcotine, as far back as 1803 and 1805, without recognizing however, their differences or establishing their alkaloidal nature.

Felter & Lloyd, King's Amer. Dispen. v.2, p.1278

1817

Pelletier and Magendie produced emetine from ipecacuanha.

Wootton, Chronicles of Pharmacy. v.2, p.248

1817

Pelletier and Caventou isolated brucine from false angostura bark (*Brucaea anti-dysenterica*).

Wootton, Chronicles of Pharmacy. v.2, p.248

1817

Brucine sulfate was isolated by Pelletier and Caventou.

Wood-LaWall, U. S. Dispensatory. 22 ed. p.237

1817

Das salzsaure morphium (Morphium muriaticum) schießt federartig an, wobei man jedoch die strahlenförmige Gruppierung häufig vorfindet; es ist bedeutend schwerer auflöslich als die übrigen Morphiumsälze; und gerinnt, wenn man es zu weit abgeraucht hat, beim Erkalten plötzlich zu einer glänzenden, silberweissen, federartigen Salzmasse.

Gilbert, Annalen der Physik. 1817, p.65

1817

Das schwefelsaure Morphium (Morphium sulphuricum) krystallisirt in zweigförmig verasteten Strahlen, und ist eben so auflöslich.

Gilbert, Annalen der Physik. 1817, p.65

1817

Chevreul first obtained valerianic acid from the oil of the dolphin and named it delphinic acid which was changed to valerianic acid.

Felter & Lloyd, King's Amer. Dispen. v.1, p.99

1818

Potassium thiocyanate was known as early as 1818 by A. Vogel.

American Jour. of Pharmacy. v.58, 1886, p.533

1818

Hydrogen peroxide was discovered by Thenard.

Grier, A History of Pharmacy. p.237

1818

Ce n'est qu'en 1818 que le principe colorant de la cochenille a ete isole par M.M.Pelletier et Caventou, qui lui out donne le nom de carmine.

Jour. de Pharmacie et de Chimie. v.38-39, 1844, p.249

1818

L. Pelletier & Caventou discovered discovered an alkaloid in St. Ignatius's beans, to which they gave the name of strychnine.

Wootton, Chronicles of Pharmacy. v.2, p.246

1819

Du Sulfate de strychnine.

L'acide sulfurique s'unit a la strychnine, et forme avec cette base un sel neutre, soluble dans moins de dix parties d'eau froide, plus soluble a chaud, cristallisable par le refroidissement, et mieux encore par evaporation spontanee. Par Pelletier et Caventou.

Jour. de Phar. et de Chimie. v. 2, 1819, p.154

1819

Du Phosphate de strychnine.

L'acide phosphorique forme avec la strychnine un sel soluble, parfaitement cristallisable. Ce sout des prismes quadrangulaires tres-prononces.

Jour. de Phar. et de Chimie. v.2, 1819, p.156

1819

Du Nitrate de strychnine.

L'acide nitrique a deux modes d'action sur la strychnine. Quand l'acide nitrique est tres-étendu d'eau, il s'unit a la strychnine et forme avec elle un sel neutre. Lorsqu'il est tres-concentré, une réaction a lieu entre ses élémens et ceux de la strychnine, et produit des phénomènes remarquables.

Jour. de Pharm. et de Chimie. v.2, 1819, p.156

1819

Pelletier and Caventou discover quinine.

LaWall, 4000 Years of Pharmacy. p.581

1819

Chrysophanic acid was discovered by Schrader in the *Parmelia parietina*, Linne, a common wall lichen. In 1843 it was purified by Rochleder and Heldt, who gave it the name chrysophanic acid, from its yellow color.

Felter & Lloyd, King's Amer. Dispen. v.1, p.46

1819

Naphthaline was observed in the products of the distillation of coal, by A Garden, and believed by him to be a camphor. J.Kidd (1821) gave it its present name.

Felter & Lloyd, King's Amer. Dispen. v.2, p.1304

1820

Chemische Untersuchung des Tollkirschenkrautes (Herb, Belladonnae) und Entdeckung des Atropiums, eines neuen Alkaloides. Von Dr. Rudolph Brandes

Buchner, Repertorium für die Pharmacie. v.8, 1820, p.289

1820

Das schwefelsaure Atropium krystallisirt beim Verdunsten an der Luft in ausgezeichneten Krystallen, wenn man eine hinreichende Menge Atropium angewendet hat.

Buchner, Repertorium für die Pharmacie. v.8, 1820, p.75

1820

Anethol. Dieser seit langer Zeit bekannte, bereits 1820 von de Saussure (A.ch.2,13,280) wissenschaftlich untersuchte Bestandteil des Anisöls usw.

Ullman, Enzyklopädie der technischen Chemie. v.1, p.433

1821

Du phosphate de quinine.

On se rapelle que le phosphate de cinchonine est pour ainsi dire incristallisable il n'en est pas de meme du phosphate de quinine, ce sel cristallise tres-facilement et se presente en pelites aiguilles blanches translucides un peu nacrees, il est soluble dans l'alcohol. Par P.J.Pelletier et J.B.Caventou.

Jour. de Phar. et du Chimie, 1821, p.86

1821

De l'hydrochlorate de quinine.

Ce sel est plus soluble que le sulfate de quinine et moins que l'hydrochlorate de cinchonine. Il differe aussi de ce dernier par son aspect nacree; il est aussi plus fusible.

Analyse par methodes connues il s'est trouve forme de:

quinine	100
acide hydrochlorique	70862

Par P.J.Pelletier et J.B.Caventou.

Jour. de Phar. et du Chimie, 1821, p.86

1821

Du sulfate de quinine.

L'acide sulfurique dissout la quinine et forme avec cette base un sel neutre qui cristallise tres-facilement.

Jour. de Phar. et du Chimie. 1821, p.85

1821

Robiquet isolated caffeine from the coffee plant.

Wootton, Chronicles of Pharmacy. v.2, p.247

1821

Codeine was discovered by Robiquet when he was examining a new process for obtaining morphine which had been suggested by Dr. William Gregory, of Edinburgh.

Wootton, Chronicles of Pharmacy. v.2, p.248

1821

Oleic acid was first obtained by Chevreul.

Felter & Lloyd, King's Amer. Dispen. v.1, p.72

1822

Iodoform was discovered by Serullas, and introduced into medicine by Glover and Bouchardat (1837). Its composition was determined by Dumas (1834).

Feleter & Lloyd, King's Amer. Dispen. v.2, p.1060

1823

Berzelius discovered the mode of preparing pure silicium.

Gmelin, Hand-Book of Chemistry. v.3, p.350

1825

Benzene was discovered by Faraday among the by-products from oil-gas.

Grier, A History of Pharmacy. p.193

1825

Hydriodic acid was discovered shortly after the detection of iodine. The process for its preparation, recommended in Dana's Chemical Philosophy 1825, by mixing moistened iodine with phosphorus, is almost identical with that offered in some of the more recent works.

Felter & Lloyd, King's Amer. Dispen. v.1, p.52

1826

Aniline was discovered by Unverdorben.

Grier, A History of Pharmacy. p.196

1826

J'ai employi plusieurs procedes pour la preparation du bromure de potassium: 1. Je l'ai obtenu en plongeant le metal dans la vapeur du brome; 2, en decomposant par son moyen l'acide hydro-bromique; 3, en unissant directement cet acide a la potasse, evaporant lor dissolution et dessechant le residu. 4. Les cristaux cubiques, que l'on obtient en saturant par la potasse l'ether charge de brome, peuvent etre concus ou comme un hydro-bromate de potasse, ou comme un bromure de potassium.

Annals de Chimie et de Physique. s.2, v.32,p.355

1826

Bromine was discovered by Balard, in the mother-liquor of sea water, and examined by himself and by Löwig and Serullas in its most important chemical relations.

Gmelin, Hand-Book of Chemistry. v.2, p.272

1826

Oerstedt showed how to prepare the chloride of aluminum by passing chlorine over a red-hot mixture of alumina and charcoal.

Watts, Dictionary of Chemistry. v.1, p.149

1826

Precipitated phosphate of lime was prepared by the Dublin Pharmacopoeia.

Wood & Bache, Dispen. of the U.S.A. 1843, p.881

1826

Hydrobromic acid was obtained by Balard shortly after he discovered bromine.

Felter & Lloyd, King's Amer. Dispen. v. 1, p.54

1827

Terpin hydrate was isolated by Voget. It was synthesized in 1906 by Perkin.

Hilditch, A Concise History of Chemistry. p.149

1827

Aluminum sulfate was found native as aluminite by Berzelius.

Gmelin, Hand-Book of Chemistry. v.3, p.312

1827

Oudry found an alkaloid in tea and called it theine.

Wootton, Chronicles of Pharmacy. v.2, p.247

1827

Bromide of ethyl was discovered by Serullas, who made it by acting upon phosphorus with bromine, in contact with alcohol.

Felter & Lloyd, King's Amer. Dispen. v.1, p.124

1828

Un atome des acides hyponotieux, acetique, benzoique, oxalique, sature quatre volumes d'ammoniaque.

Benzoate d'ammoniaque hydrate. Par J.Dumas et Polydore Boullay.

Jour. de Phar. et de Chimie. v.20, 1828, p.137

1829

Ammonium bromide was prepared by Charles Lowig.

Journal of Pharmacy. v.2, 1830, p.104

1830

The action of bromine on sodium has not yet been examined; but it probably resembles much that of bromine on potassium. It may be obtained by heating the hydrobromate of soda to perfect dryness. By Charles Löwig.

Journal of Pharmacy. v.2, 1830, p.174

1830

Bussy isolated magnesium by heating in a glass tube some potassium covered with fragments of chloride of magnesium and washing away the chloride of potassium formed.

Wootton, Chronicles of Pharmacy. v.1, p.358

1830

Creosote was discovered by M. Reichenbach.

Felter & Lloyd, King's Amer. Dispen. v.1, p.614

1830

Salicin was discovered by Leroux, and its glucosidal nature recognized by Poria.

Felter & Lloyd, King's Amer. Dispen. v.2, p. 1700

1830

Santonin was discovered by Kahler and Alms, simultaneously.

Felter & Lloyd, King's Amer. Dispen. v.2, p.1717

1831

The first discovery of chloroform was in 1831, by Mr. Samuel Guthrie, a chemist residing in Sackett's Harbor, N.Y.; subsequently, in 1832, Soubeiran, of France, and Liebig, of Germany, prepared it; neither of these gentlemen being aware of the other's discovery.

Felter & Lloyd, King's Amer. Dispen. v.1, p.513

1831

Benzaldehyde was obtained by Liebig and Wöhler (from amygdalin).

Hilditch, A Concise History of Chemistry. p.129

1831

Citrate of iron in scales was introduced by Beral.

Wootton, Chronicles of Pharmacy. v.1, p.405

1832

Pelletier is credited with producing narceine.

Wootton, Chronicles of Pharmacy. v.2, p.248

1832

Chloral hydrate crystals were first prepared by Liebig

Wootton, Chronicles of Pharmacy. v.2, p.272

1833

The best method of preparing caustic potash (potassium hydroxide), according to J. Liebig, is to dissolve the carbonate of potassa in at least 10 parts of water.

Journal of Pharmacy. v.5, 1833, p.84

1833

The use of potassium citrate as a substitute for the unpharmaceutic preparation of lemon juice and carbonate of potassa in neutral mixtures, induced us to prepare considerable quantities of it. The following is a ready mode, and we believe it has never before been recommended in print;

Take of crystals of citric acid, powd. parts	9.50
Take of salt of tartar (carb. potassae)	11.00
Combined and dried, they produce citrate of potassa.	

Journal of Pharmacy. v.5, 1853, p.291

1833

Ethyl carbamate, commonly called urethane was discovered by Dumas.

Army, Principles of Pharmacy. 4th ed. p.755

1833

Quinidine was isolated by Henry and Delondre.

Wootton, Chronicles of Pharmacy. v.2, p.247

1834

Geiger and Hesse have extracted colchicine from the seeds of *Colchicum autumnale*.

Journal of Pharmacy. v.6, 1834, p.320

1834

Phenol was discovered in the tar of coal, by Runge, who gave it the name of carbolic acid.

Wood, Remington, Sadtler, U.S.Dispen. 19th ed. p.925

1834

Nitrobenzene was discovered by Mitscherlich and was originally made by slowly adding benzene to warm fuming nitric acid.

Felter & Lloyd, King's Amer. Dispen. v.2, p.1311

1835

Ammonium iodide was first prepared by Charles Ellis.

Journal of Pharmacy. v.7, 1835, p.283

1835

Methyl iodide was discovered in 1835 by Dumas and Peligot.

Felter & Lloyd, King's Amer. Dispen. v.2, p.1260

1836

Yellow mercurous iodide was prepared by P.H.Boutigny.

Journal of Pharmacy. v.8, 1836, p.326

1837

M. Guyot prepared sodium iodide.

Journal of Pharmacy. v.9, 1837, p.80

1837

Sulphate of iron was prepared by M. Bonsdorff.

Journal of Pharmacy. v. 10, 1838, p.248

1837

Amygdalin was isolated by liebig and Wöhler.

Grier, A History of Pharmacy. p.57

1838

Trichloracetic acid was discovered by Dumas.

Wood, Remington, Sadtler, U.S.Dispen. 19th ed. p.86

1839

In the year, 1839, an article, from the pen of M. Piria stated that by heating salicin, with mixtures of bichromate of potassium and sulfuric acid, an oily product was obtained, which he named hydruret of salicyle (since known as salicylous acid). When this substance was heated with caustic potash, the mass dissolved in water, and then treated with excess of hydrochloric acid, a white substance crystallized, which Piria named salicylic acid.

Felter & Lloyd, King's Amer. Dispen. v.1, p.81

1839

Regnault discovered carbon tetrachloride.

Felter & Lloyd, King's Amer. Dispen. v.1, p.444

1840

Sir William Burnett took out a patent for preserving animal and vegetable substances by means of chloride of zinc.

Journal of Pharmacy. v.19, 1847, p.269

1840

Au nombre des publications qui mentionnent ce médicament (yellow oxide of mercury), je me contenterai de citer, comme exemple, la Pharmacopée universelle de Jourdan, qui date de 1840, et qui rapelle le procédé consigné dans l'ancienne pharmacopée suédoise.

P. Constantin, Repertoire de Pharmacie.n.s.5, 1877, p.417

1840

Du naphthole.

Nous avons donné ce nom, on se le rappelle, à la troisième matière huileuse que nous avons signalée dans le naphthole. C'est celle qui bout à 190, dont la densité à l'état de vapeur est 5, 3, et dont la composition est.

Carbone 86,7

Hydrogène 13,2

Par Pelletier et Walter.

Jour. de Phar. et de Chimie. v.32, 1840, p.566

1841

Bismuth subgallate was originally prepared by Bley.

Wood, Remington, Sadtler, U.S.Dispen. 19th ed. p.241

1843

Arsenic triiodide or iodide of arsenic was formed by Wackenroder.

Wodd & Bache, Dispen. of the U.S.A. 1847, p.1265

1844

Amyl nitrite was discovered by M. Balard, who gave an account of its chemical and physical properties.

Felter & Lloyd, King's Amer. Dispen. v.1, p.188

1844

Cotarnine chloride was first prepared by Wöhler in 1844 by the oxidation of narcotine with manganese dioxide and sulfuric acid. It was synthesized by Salway in 1910 from myristicin.

Wood-LaWall, U.S. Dispen. 22 ed. p.374

1844

Cocaine was isolated by Gaedken from Brazilian coca leaves.

Wood-LaWall, U.S. Dispen. 22 ed. p.350

1844

Cinchonidine was isolated by Winckler, but the name of the latter was given by Pasteur in 1853.

Wootton, Chronicles of Pharmacy. v.2, p.247

1846

Prof. Kahlbaum calls attention to the fact that, although up to the present time the encyclopedias all give the credit for the discovery of collodion to Dr. Maynard, of Boston, the actual discoverer was Christian Friedrich Schoenbein, who discovered guncotton itself.

Amer. Pharm. Ass. Proceedings. v.50, 1902, p.707

1846

Calcium glycerophosphate, called for brevity's sake glycerophosphoric acid, was discovered by Pelouze. Sodium Glycerophosphate was not used in medicine until many years later.

Wood-LaWall, U.S.Dispen. 22 ed. p.254, 998

1847

Pyroxylin was discovered by Schönbein.

Wootton, Chronicles of Pharmacy. v.1, p.340

1848

Papaverine was isolated by Merck.

Grier, A History of Pharmacy. p.93

1848

Papaverine hydrochloride was discovered by Merck.

Wood-LaWall, U.S.Dispen. 22 ed. p.810

1850

M. Guichon, a pharmacist of Lyons has prepared a new purgative called citrate of soda (sodium citrate).

Journal of Pharmacy. v.23, 1851, p.180

1851

Aloin was discovered by T. and H. Smith of England.

Flückiger & Hanbury, Pharmacographia. p.687

41

1851

Digitalin was isolated in 1851 by Walz.

Grier, A History of Pharmacy. p.57

1852

Zinc iodide was first used in the form of a syrup prepared by A. B. Taylor.

Wood, Remington, Saedtler, U.S.Dispen. 19th ed. p.1353

1853

Red mercuric iodide was prepared .

King's Amer. Dispen. 15 th ed. p.1287

1853

Sparteine sulfate was discovered by Stenhouse.

King's American Dispen. v.2, p.1804

1853

Cinchonidine sulfate prepared by H. G. Leers.

Chemical Gazette. v.2, 1853, p.161

1853

Mr. William Gossage, of Widness Dock, near Warrington took out a patent for the manufacture of "caustic soda" or sodium hydroxide.

Pharmaceutical Jour. e.2, v.4, p.112

1853

Acetanilide was first prepared by Gerhardt, but its physiological action was only discovered by Cahn and Hepp in the eighties.

Wootton, Chronicles of Pharmacy. v.2, p.273

1854

Reduced iron, or iron reduced by hydrogen, was first prepared by Theodore Quevenne, chief pharmacist of the Hopital de la Charite.

Wootton, Chronicles of Pharmacy. v.1, p.404

1855

Milk of magnesia was known to X. Landerer.

Amer. Jour. of Pharmacy. v.27, 1855, p.539

1857

Dr. Hannow, of Brussels prepared subcarbonate of bismuth.

Amer. Jour. of Pharmacy. v.29, 1857, p.403

1858

Manganese hypophosphate was prepared by Pelouze and Fremy.

Amer. Jour. of Pharmacy. v.30, 1858, p.512

1858

Potassium hypophosphite was prepared by Pelouze and Fremy.

Amer. Jour. of Pharmacy. v.30, 1858, p.512

1858

Sodium hypophosphite was prepared by Prof. W. Procter Jr.

King's Amer. Dispen. v.2, p1781

1858

Calcium hypophosphite was prepared by Prof. Procter.
King's American Dispen. v.1, p.395

1860

Pure cerium oxalate was prepared by F. F. Mayer.
Stille ans Maiscj, The Nat. Dispen. 3 ed. p.416

1860

Soluble ferric pyrophosphate was prepared by E.R. Squibb.

King's Amer. Dispen. 15th ed. p.1028

1861

Monobrated camphor was discovered by Th. Swarts, who prepared it by heating bibromide of camphor in a sealed tube to 100 degrees.

Wood & Bache, Dispen. of the U.S. 15th ed. p.336

44

1862

Potassium chloride has been known since 1862.

Amer. Phar. Ass. Proc. v.10, 1862, p.144

1862

Cocaine hydrochloride was first prepared by W Lossen

American Druggist. v. 13-14, 1884-85, p230

1862

Calcium bromide was prepared by Ferdinand F. Mayer.

Amer. Jour. of Pharmacy. v.34, 1862, p.295

1863

Sinigrin was isolated by Will.

Grier, A History of Pharmacy. p.57

1863

Hydrastine hydrochloride was described by Mahla, of Chicago.

American Druggist. v. 13-14, 1884-85, p.175

1864

Resorcin was discovered by Hlasiwetz and Barth in the process of fusing galbanum resin with caustic potash, neutralizing with sulfuric acid and extracting with ether.

Felter & Lloyd, King's Amer. Dispen. v.2, p.1649

1867

A coloring substance called caramel is now manufactured from sugar. For the precise mode of preparation, see a paper by Thos. Sherlock in the Chemical News for June 7, 1967, p.282.

Wood & Bache, U.S.Dispen. 13th ed. p.759

1867

Formaldehyde is a gas, and was discovered in 1867, by Von Hoffman, who obtained it by passing the vapor of a mixture of methylic alcohol and air over red-hot, finely-divided platinum.

Felter & Lloyd, King's Amer. Dispen. v.1, p.893

1868

Guaiacol has been prepared synthetically by Gorup-Besanez by combining iodide of methyl, with pyrocatechin.

Flückiger & Hanbury, Pharmacographia. p.105

1868

Sir William Perkin effected the synthesis of coumarin, the aromatic principle in woodruff and hay.

Thorpe, History of Chemistry. v.2, p.105

1869

Matthiessen prepared apomorphine from morphine and codeine.

Grier, A History of Pharmacy. p.93

1869

Schäffer first prepared naphthol.

Felter & Lloyd, King's Amer. Dispen. v.2, p.1305

1870

Professor Fraser, in his first accounts of strophanthus, stated that its active principle was a crystallizable glucoside strophanthin.

American Druggist, v. 15-16, 1886-87, p.205

1870

Zinc phenolsulfonate or zinc sulphocarbolate was prepared by A. B. Lyons.

Amer. Jour. of Pharmacy. v.42, 1870, p.508

1870

Apomorphine, in the form of its sulfate, was first prepared by Arppe. The free base (apomorphine hydrochloride) was subsequently prepared by Mathiessen and Wright.

Wood-LaWall, U.S.Dispen. 22 ed. p.158

1871

The alkaloid hyoscyamine was isolated from the seeds by Hohn.

Grier, A History of Pharmacy. p.62

1871

Tiemann and Haarmann obtained vanillin, the characteristic aromatic body in the vanilla pod, by synthetic means, and established its manufacture on a commercial scale.

Thorpe, History of Chemistry. v.2, p.105

1871

Gallotannic acid was found by Schiff to be an anhydrid of gallic acid.

Felter & Lloyd, King's Amer. Dispen. v.1, p.94

1872

Phystigmine salicylate was prepared.

Wood, Remington, Sadtler, U.S.Dispen. 16th ed. p.1146

1874

Pilocarpine was separated by Gerrard of London soon after the crude drug Jaborandi had been made known by Cutinko, a Portuguese physician.

Grier, A History of Pharmacy. p.156

1875

Pilocarpine hydrochloride was prepared by A.W. G. Gerrard.

Stille and Maisch, The Nat. Dispen. 2 ed. p.1084

1875

Quinine hydrobromide was prepared by M. Boille.

Amer. Jour. of Pharmacy. v.47, 1875, p.278

1875

Sodium thiosulfate was used for the preservation of raspberry juice by Mr. James Kremble.

Amer. Jour. of Pharmacy. v.47, 1875, p.279

1875

Salicylsaures Ammon als Ersatz der Salicylsätze zum innerlichen Gebrauche. Martenson (Pharm. Zischr. f. Rssld. 1875 No. 21 p.641) schlägt vor das salicylsaure Ammon an Stelle der Salicylsäure zu reichen, welche letztere namentlich von Kindern schwer genommen wird, Kratzen im Halse und Häussig Erbrechen verursacht.

G. Dragendorf, Jahresbericht die Fortschritte der Pharmacognosie, Pharmacie und Toxicologie. x. Jahrgang, 1855, p.317

1876

Sodium salicylate was made by John Williams. It is made by neutralizing a solution of salicylic acid with caustic soda, and evaporating to dryness.

Amer. Jour. of Pharmacy. v.48, 1876, p.546

1876

Methylene blue or methylthionine chloride was discovered by Caro in 1876.

Wood-LaWall, U.S. Dispen. 22 ed. p.682

Before 1878

Phenol-Phtalein was discovered a few years ago by Baeyer.

Amer. Jour, of Pharmacy. v. 50, 1878, p.33

1878

Amaranth, saurer Azofarbstoff aus Naphthionsäure und b-Naphtholdisulfosäure R nach D.R.P. 3229.

Ullman, Enzyklopädie der technischen Ckimie. v.1, p.343

1878

Quinine and urea hydrochloride was discovered by Kutais.

Wood-LaWall, U.S.Dispen. 22 ed. p.917

1879

Lithium citrate was prepared.

King's Amer. Dispen. 15th ed. Supp. p. 110

1879

Lithium carbonate was prepared.

King's Amer. Dispen. 15th ed. Supp. p.109

1879

Lithium bromide was prepared.

King's Amer. Dispen. 15th ed. Supp. p.108

1879

Lithium benzoate was recommended by E. B. Shuttleworth.

King's Amer. Dispen. 15th ed. Supp. p.107

1879

Quinine salicylate was prepared.

King's Amer. Dispen. v. 2, p.1627

1879

Benzoate of sodium came into use .

King's Amer. Dispen. 15th ed. Supp. p.141

1880

Petrolatum was prepared.

King's Amer Dispen. v. 2 p. 1448

1880

Pelletierine Tannate was discovered by Tanret.

King's Amer. Dispen. v. 2, p.954

1880

Acid ammonium valerate. An acid and a neutral salt are distinguished by Hager, who reports that the commercial ammonium valerianate is always the acid salt, which consists usually of handsome crystals, having an acid taste and reaction, and readily decomposed unless kept in tightly stoppered bottles.

A. Ph. A. v.28, 1880 p.306

1882

Homatropine hydrobromide was made.

King's Amer. Dispen. v. 2, p.995

1882

Mercuric salicylate was prepared by H. Lajoux and A. Grandoal.

Amer. Jour. of Phar. v. 54, 1882, p.304

1882

Quinine bisulfate was prepared by the Dutch Society for the advancement of pharmacy.

Amer. Phar. Ass. Proc. v.30, 1882, p.412

1882

Ichthammol is the product that was introduced under the name of "ichthyol" by Rudolf Schröter.

Ichthyol, Merck & Co. p.85

1882

Barbital, was first prepared by Conrad and Guthzeit but not used in medicine until 1904.

Wood-LaWall, U.S.Dispen. 22 ed. p.214

1883

The best process for purifying petroleum Benzine without distillation was given by Fred Grazer.

Proc. of the Cal. Phar. Soc. v.14, p.45

1883

Eucaine hydrochloride was introduced by E. Schering under the name of Eucaine, German patent No. 97, 672; U.S. patent No. 657,880 (The latter expired Sept. 11, 1900).

Remington & Wood, U.S. Dispen. 20th ed. p. 232

1883

The action of paraldehyde was first studied by Dr. Cervello, of Palermo.

Jour. of Phar. v. 55, 1883, p.377

1883

Sodium stearate was first prepared by Mr. Reeb.

Druggist Circular, NOV. 1883, p.163

1883

Homatropine was prepared by Ladenburg.

Grier, A History of Pharmacy. p.60

1883

Phenyl salicylate, or salol, was brought into use as a medicine by Dr. Sahli, of Basel, though previously prepared by Prof. Nenchi, of Berne.

Felter & Lloyd, King's Amer. Dispen. v. 2, p.1703

1883

Knorr first produced antipyrine (phenazone).

Felter & Lloyd, King's Amer. Dispen. v. 1, p.220

1884

Jahns found eucalyptol to possess the formula $C_{10}H_{18}O$, and to be identical with cineol, a substance obtained by Wallach and Brass.

King's Amer. Dispen. v. 1, p.733

1884

My double salts of caffeine are prepared in fixed equivalent proportions, so that for instance caffeine sodium benzoate contains 50% caffeine (1.0 gramme of the double salts equals 0.5 gramme pure caffeine). By E. Merck.

American Druggist. v.13-14, 1884-85, p.143

1885

Exsiccated sodium arsenate was prepared.

King's Amer. Dispen. v.2, p.1764

1885

Pilocarpine nitrate was prepared.

King's Amer. Dispen. v.2, p.1478

1886

Sodium thiocyanate has been found by Dr. Paschkis to have an action similar to that of strychnine.

Amer. Jour. of Phar. v.58, 1886, p.533

1886

Strontium salicylate was prepared by Mr. Milone.

Amer. Jour. of Phar. Ass. Pro. v. 34, 1886, p.588

1886

Scopolamine hydrobromide was first used by Dr. S.G, Bebber.

Amer. Jour. of Phar. v.58, 1886, p.608

1887

Lithium salicylate was prepared.

King's Amer. Dispen. v.2, p.1198

1887

Iron and ammonium citrate was prepared by R. Rother.

King's Amer. Dispen. v.1, p.860

1887

Cinchophen was described by Doebner and Giesecke, who prepared it by warming together pyroacemic acid, benzaldehyde, and anilin in alcoholic solution.

New and Nonofficial Remedies. 1937, p.167

1887

Methyl salicylate was prepared synthetically by G. M. Beringer.

Amer. Jour. of Phar. 1887, p.7

1887

Purified talc was first prepared.

Proc. of the Amer. Pharm. Ass. 1887, v.35, p.16

1887

It was St. Claire Deville who first studied the terebene produced by the action of sulfuric acid upon oil of turpentine. J. Riban found that this "terebene" was not a pure substance. Riban, then prepared a "pure terebene".

Amer. Druggist. v.15-15, 1886-87, p.63

1887

The sweet principle derived from coal-tar, was discovered by Dr. C. Fahlberg, and called by him saccharin.

Amer. Druggist. v.15-16, 1886-87, p.202

1887

Ephedrine was first isolated in a pure form by Nagai of Japan.

Wood-LaWall, U?S.Dispensatory. 22 ed. p.425

1887

Phenacetin was introduced to the profession by Kast and Hinsberg.

Felter & Lloyd, King's Amer. Dispen. v.2, p.1455

1888

Schimmel & Co. (Report Oct.,1888) made known eugenol.

King's Amer. Dispen. v.1, p.419

1888

Sulfonmethane was introduced into medicine by Baumann and Kast.

Wood-LaWall, U.S.Dispen. 22 ed. p.1050

1888

Sulfonethylmethane was introduced into medicine by Baumann and Kast.

Wood-LaWall, U.S.Dispen. 22 ed. p.1050

1888

Arecoline hydrobromide was discovered by Jahns.

Wood-LaWall, U.S.Dispen. 22 ed. p.177

1888

Theophylline was discovered by Kassel and was synthesized in 1895 by E. Fischer and in 1900 by Traube.

Hilditch, A Concise Hos. of Chem. p.159

1889

Guaiacol carbonate was prepared by Dr. F. von Heyden and patented in 1889.

J. Houben, Fortschritte der Heilstoffchemie. 1877-1900, p.97

1889

Succinimide of Mercury.- This new mercurial has the formula $C_2H_4CO_2NH$ and it may be formed by heating together succinic acid, carbonic anhydride and ammonia.

Amer. Phar. Ass. Proc. v.37, 1889, p.666

1889

The derivative of acridine namely acriflavine was first marketed in 1889.

Wood-LaWall, U.S.Dispen. 22 ed. p.68

1889

Sodium nitrite was prepared.

Amer. Jour. of Phar. v.161, 1888, Op.618

1889

Ferric hypophosphite was prepared according to F. X. Moerk.

Amer. Jour. of Phar. v. 61, 1889, p.387

1890

Pyoktamin or methyl-violet (methyl-rosaniline) is a mixture of aniline products of uncertain composition.

Amer. Jour. of Phar. v.62, 1890, p.639

1890

The introduction of strontium bromide into medicine is due to Dr. J. V. Laborde.

King's Amer. Dispen. v.2, p.1842

1890

Soluble ferric phosphate was at first called Ferri Phosphas, but the Pharmacopoeial Committee of 1890 designated it as a Soluble Ferric Phosphate, thus preventing it from being confounded with True ferric phosphate.

King's Amer. Dispen. 18th ed. v.1, p.877

1890

Diuretin is the fanciful name for a sodio-salicylic compound of theobromine, corresponding to one of the soluble salts of caffeine.

Amer. Druggist. v.19-20, 1890-91, p.36

1890

E. Schmidt isolated hyoscine or scopolamine from *S. Japonica* and later from *S. carniolica*, and made clear the distinction between these four alkaloids: atropine, hyoscyamine, hyoscine and scopolamine.

Grier, A History of Pharmacy. p.60

1890

Dr. F. Goldman calls attention to a new iodized phenol, which has been placed upon the market under the trade name "Aristol".

Amer. Phar. Ass. Proc. v.38, p.625

1891

Bimuroate of quinine or quinine dihydrochloride may be prepared by Vitali's process of 1891.

King's Amer. Dispen. v.2, p.1630

1891

Bismuth subsalicylate was prepared by M. Causse.

Amer. Jour. of Phar. v.63, 1891, p.401

1892

Many cresol preparations such as creolin, lusol, solveol, and solutol have been known since 1892.

Amer. Phar. Ass. Proc. v.41, 1893, p.511

1892

Creosote carbonate was introduced under this name by Chaumier.

King's Amer. Dispen. v.1, p.617

1893

Chiniofon powder was introduced under the trade name loretin.

Amer. Pharm. Ass. Proc. v.42, 1894, p.732

1893

Codeine sulfate was obtained by Anderson and Armstrong.

Amer. Phar. Ass. Proc. v.41, 1893, p.842

1894

Soluble iodophthalein was made by A. Classen and W. Loeb.

Amer. Prar. Ass. Proc. v. 43, 1895, p.697

1894

Ferric glycerophosphate was first prepared by Albert Robin.

Amer. Phar. Ass. Proc. v.43, 1895, p.687

1894

Manganese glycerophosphate was first prepared by Albert Robin.

Amer. Phar. Ass. Proc. v.42, 1894, p.725

1894

Liquid petrolatum was prepared.

King's Amer. Dispen. v.2, p.1449

1894

Chlorbutanol was introduced by Abel as a hypnotic.

Wood-LaWall, U.S.Dispen. 22 ed. p.323

1894

Piperine was synthesised by Ladenburg and Scholtz.

Wootton, Chronicles of Phar. v.2, p.266

1895

Diluted erythrityl tetranitrate was studied by J.B.Bradbury.

Remington, Wood, U.S.Dispen. 20th ed. p.1509

1895

Acetyltannic acid or tannigen was manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany. U.S. patent No. 533,718 (feb. 5, 1895).

New and Nonofficial Remedies. 1911, p.217

1895

Haller partially synthesized camphor.

Hilditch, A Concise History of Chem. p.255

1896

Albumin Tannate manufactured by Knoll & Co., Ludwigshafen a. R., Germany, and New York. U.S. patent No. 563,479 (July 7, 1896).

New and Nonofficial Remedies. 1911, p.216

1897

Pyramidon or aminopyrine manufactured by Farwerke, vorm. Meister, Lucius & Breuning, Hoechst a. M., Germany (Farbwerke Hoechst Co., N.Y.). U.S. patent No. 579,412 (March. 23, 1897).

New and Nonofficial Remedies. 1913, p.200

1897

Holocaine or phenacaine hydrochloride in a new local anaesthetic discovered in 1897.

Amer. Phar. Ass. Proc. v.45, 1897, p.728

1897

In 1897 Dr. John Abel separated from the suprarenal capsule the benzoyl-chloride of a base to which he gave the name epinephrine. The pure base was isolated in 1901 almost simultaneously by von Furth, who named it suprarenin, and Takamine, who named it adrenalin, the latter of whom patented the name and product.

Wood-LaWall, U. S. Dispen. 22 ed. p.429

1897

Quinine ethylcarbonate manufactured by Vereinigte Chininfabriken, Zimmer & Co., Frankfort, a. M., Germany (Merck & Co., N.Y.) U.S. patent No. 585,068 (June 22, 1897)

New and Nonofficial Remedies. 1913, p.203.

1898

Strong silver protein or protargol was manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany. U.S. Patent No. 615,970 (Dec. 13, 1898).

New and Nonofficial Remedies. 1911, p.172

1898

Peptonized iron was first prepared by Prof. Wilber L. Scoville.

Druggist Circular. v.41-42, 1897-98, p.287-288

1898

Nebelthan discovered veronal the first diurede or barbituric acid hypnotic drug.

Grier, A History of Pharmacy. p.198

1899

Potassium guaiacol-sulphonate was introduced under the trade name Thiocol.

Amer. Phar. Ass. Proc. v.47, 1899, p.699

1899

Dionine or ethylmorphine hydrochloride was introduced by E. Merck.

Merck's Annual Report. 1926-28, p.120

1899

Aspirin (acetylsalicylic acid) was discovered by Hoffmann and introduced into medicine in 1899.

Grier, A History of Pharmacy. p.200

1900

Sodium cacodylate was prepared.

Proc. of the Amer. Phar. Ass. v.49, 1901, p.852

1900

Hexamethylenetetramine is the name originally used for methenamine by Nicolaier.

Wood, Remington, Sadtler, U.S.Dispen. 19th ed. p.610

1901

Soluble manganese citrate was prepared by F. B. Power.

Year-Book of Phar. and Trans. of the Br. Pharm. 1901, p.459

1901

Atropine was synthesized by Wilstätter.

Grier, A History of Pharmacy. p.59-60

1902

Theocin Soluble, a brand of theophylline with sodium acetate-U.S.P. Manufactured by Winthrop Chemical Co. N.Y. U.S. patent 716,994 (Dec. 30, 1902).

New and Nonofficial Remedies. 1936, p.469

1903

Nicotine was synthesized by Pictet.

Wootton, Chronicles of Pharmacy. v.2, p.266

1904

Citrated caffeine was prepared by Merson.

Wood-LaWall, U.S.Dispen. 22 ed. p.245

1905

Medinal, a brand of barbital sodium (sodium barbital U.S.P.) Manufactured by Schering & Glatz, Inc. N.Y. U.S. patent 780,241 (Jan. 17, 1905).

New and Nonofficial Remedies. 1936, p.116

1905

Chloramine-T was first made by Chattaway in 1905 but its introduction as a medicine was due to the studies of Dr. Dakin in 1915, who suggested for it the name of chloramine.

Wood-LaWall, U.S.Dispen. 22 ed. p.321

1905

Etard made sodium perborate with boric acid and sodium peroxide.

Wood-LaWall, U.S.Dispen. 22 ed. p.1004

1906

Sajodin, a brand of calcium iodobehenate U.S.P. Manufactured by Winthrop Chemical Co. Inc., N.Y. U.S. patent 830,509 (Dec. 25, 1906).

New and Nonofficial Remedies. 1936, p.250

1906

Fischer discovered the dye stuff known as scarlet red.

Wood-LaWall, U.S.Dispen. 22ed. p. 1004

1906

Novocain, a brand of procaine hydrochloride, U.S.P. manufactured by Winthrop Chemical Co., Inc. N.Y.? under U.S. patent 812,554 (Feb. 13, 1906)

1908

Ammonium hypophosphite was admitted to New and Non-official Remedies in 1908. However it has long been known.

A. M. A. Council of Phar. and Chem. Reports. 1916, p.51

1910

Euphyllin is the trade name given to "Theophylline aethyleudiamine". (Theophylline with Ethylene Diamine).

Proc. of the Amer. Phar. Ass. v.59, 1911, p.131

1910

Chaulmestrol, a brand of ethyl chaulmoograte manufactured by Winthrop Chemical Co., N.Y. U.S. patent 957,633 (May 10, 1910).

New and Nonofficial Remedies. 1936, p.151

1910

Arsphenamine was introduced into medicine in 1910 as the result of a long series of experiments by Ehrlich.

Wood-LaWall, U.S.Dispen. 22 ed. p.193-194

1910

Morgenroth prepared a compound in which the hydroxyl was replaced by an ethoxy group and the unsaturated side group of the aniline ring was completely saturated. This compound is officially designated as ethylhydrocupreine hydrochloride.

Wood-LaWall, U.S.Dispen. 22 ed. p.68

1911

Tetrachlorethylene has been known since 1911.

Wood-LaWall, U.S.Dispen. 21 ed. p.1501

1911

Adalin, a brand of carbromal U.S.P. manufactured by Winthrop Chemical Co., Inc. N.Y. U.S. patent 983,425 (Feb. 7, 1911).

New and Nonofficial Remedies. 1936, p.144

1911

Phenolsulfonphthalein was introduced by Geraghty and Howntree.

Wood-LaWall, U.S.Dispen. 22 ed. p.834

1912

Pure calcium lactate was prepared.

Remington & Wood, U.S.Dispen. 20th ed. p.258

1912

Merbaphen manufactured by The Bayer Co., Inc., Rensselaer, N.Y. U.S. patent 1,034,092 (July 30, 1912).

New and Nonofficial Remedies. 1931, p.285

1912

Luminal, a brand of phenobarbital U.S.P.
Manufactured by Winthrop Chemical Co., Inc. Y.N. U.S.
patent 1,025,872 (May 7, 1912).

New and Nonofficial Remedies. 1936, p.111

1912

Calcreose, a brand of calcium creosote, U.S.P.
Manufactured by the Maltbie Chemical Co., Newark, N.J. U.S.
patent 1,047,961 (Dec. 24, 1912).

New and Nonofficial Remedies. 1936, p.159

1912

Cargentos, a brand of mild silver-protein U.S.P.
Manufactured by the H.K.Mulford CO., Phil. U.S. patent
1,043,640 (Nov. 5, 1912).

New and Nonofficial Remedies. 1931, p.309

1912

Luminal Sodium, a brand of soluble phenobarbital
U.S.P. Manufactured by Winthrop Chemical Co., Inc. N.Y. U.S.
patent 1,025,872 (May 7, 1912).

New and Nonofficial Remedies. 1936, p.111

Novatophan or neocincophen manufactured by
Chemische Fabrik auf Aktien, vorm. E. Schering, Berlin,
Germany (Schering & Glatz, N.Y.). U.S. patent No. 1,045,759
(Nov. 26, 1912).

New and Nonofficial Remedies. 1913, p.47

1912

Ethyl aminobenzoate manufactured by Farwerke, vorm. Meister, Lucius & Bruening, Hoeschst a. M., Germany (Victor Koechl & Co., N.Y.).

New and Nonofficial Remedies. 1912, p.89

1913

Soluble fluorescein was recommended by Straus as a test for renal function.

Wood-LaWall, U.S.Dispen. 21 ed. p.1307

1914

Activated charcoal came into existence originally through the necessities of gaseous warfare. In order to provide protection for the soldiers against the various poisonous gases, they were given respiratory masks in which the air was inhaled through charcoal to filter out these harmful vapors.

Wood-LaWall, U.S.Dispen. 22 ed. p.288

1914

Sodium acid phosphate or sodium biphosphate was prepared.

New and Nonofficial Remedies. 1914, p.281

1914

Histamine phosphate was prepared by Dr. H. Fuhner, of Berlin.

Amer. Drugg. & Pharm. Record. v.62, 1914, p.10

1914

All neocarsphenamine in use in the U.S. is manufactured under U.S. patent reissue (Dec. 15, 1914).

New and Nonofficial Remedies. 1931, p.64

1915

Thyroxin was discovered by Kendall.

Wood-LaWall, U.S.Dispen. ed. 22, p.1113

1917

Paratoluenesulphonedichloramide was introduced into medicine by H. D. Dakin and co-workers under the name "Dichloramine-T.

New and Nonofficial Remedies. 1920, p.138

1918

Chlorinated peraffin was first suggested and prepared by Dakin and Dunham.

Wood-LaWall, U.S.Dispen. 22 ed. p.812

1919

Tryparsamide was originated by Brown and Pearce of the Rockefeller Institute as a remedy for trypanosomiasis.

Wood-LaWall, U.S.Dispen. 22 ed. p.1158

1922

Bocage, A., Bujalance, R.J., & Capra, J. A. Estudio quimico del tartrobismutato de sodio y de potassio. An. Fac. med., Montev., 1921-22, 7: 483-500.

S. G. L. I. s. 4, v. 21, p.350

1923

Quinidine sulfate manufactured by Powers-Weightman-Rosengarten Company, Phil.

New and Nonofficial Remedies. 1923, p.253

1923

Ephedrine hydrochloride was isolated by K.K.Chen.

K.K.Chen, Lilly Lab.

1923

Ephedrine sulfate was isolated by K.K.Chen.

K.K.Chen, Lilly Lab.

1927

Calcium Gluconate manufactured by the Sandoz Chemical Works, Basle, Switzerland. U.S. patent 1,648,368 (Nov. 8, 1927).

New and Nonofficial Remedies. 1936, p.147

1927

German press despatches report the discovery of a new disinfectant called chlorthymol.

Year Book of the Amer. Phar. Ass. v.16-17, 1927-28, p.134

INDEX

	Page
Acetanilid.....	42
Acetone.....	7
Acetophenetidin.....	56
Acid, Acetic.....	16
Acetic, Glacial.....	16
Acetylsalicylic.....	65
Acetyltannic.....	62
Ammonium Valerate.....	50
Benzoic.....	7
Boracic.....	13
Boric.....	13
Carbolic.....	36
Carbonic Gas.....	9
Chromic.....	19
Chrysophanic.....	27
Cinchotannic.....	18
Citric.....	17
Formic.....	14
Gallic.....	18
Gallotannic.....	47
Glycerophosphoric.....	40
Hydriodic.....	30
Hydrobromic.....	31
Hydrochloric.....	10
Dydrocyanic, Diluted.....	18
Hydrofluoric.....	16
Hypophosphorous.....	24
Lactic.....	18
Nitric.....	1
Oleic.....	29
Oxalic.....	17
Phosphoric.....	12
Picric.....	20
Salicylic.....	37
Stearic.....	9
Succinic.....	8
Sulfuric.....	5
Sulfurous.....	12
Tannic.....	19
Tartaric.....	16
Trichloracetic.....	37
Valerianic.....	25
Acriflavine.....	58
Activated Charcoal.....	71
Adalin.....	69
Adrenalin.....	63
Albumin Tannate.....	63

INDEX

	Page
Alcohol.....	5
Aloin.....	40
Alum.....	3
Aluminum Chloride.....	31
Aluminum Sulfate.....	32
Amaranth.....	49
Aminopyrine.....	63
Ammonia.....	15
Ammoniated Mercury.....	6
Ammonium Acetate.....	9
Benzoate.....	32
Bromide.....	32
Carbonate.....	6
Chloride.....	1
Hypophosphite.....	68
Iodide.....	36
Salicylate.....	48
Amygdalin.....	37
Amyl Nitrite.....	39
Anethol.....	28
Aniline.....	30
Antimony and Potassium Tartrate.....	10
Antipyrine.....	53
Apomorphine.....	45
Hydrochloride.....	46
Arecoline.....	57
Aristol.....	59
Arsenic Triiodide.....	38
Trioxide.....	5
Arsphenamine.....	68
Aspirin.....	65
Atropine.....	27
Sulfate.....	28
Barbital.....	51
Sodium.....	66
Barium.....	22
Sulfate.....	17
Benzaldehyde.....	34
Benzebe.....	30
Benzoin.....	7
Betanaphthol.....	46
Bismuth.....	8
Bismuth and Potassium Tartrate.....	73
Subcarbonate.....	42
Subgallate.....	38
Subnitrate.....	19
Subsalicylate.....	60

INDEX

	Page
Bromine.....	31
Brucine.....	24
Sulfate.....	25
Caffeine.....	29
Citrated.....	66
With Sodium Benzoate.....	53
Calcium.....	22
Bromide.....	44
Chloride.....	6
Creosotate.....	70
Gluconate.....	73
Glycerophosphate.....	40
Hydroxide.....	1
Hypophosphite.....	43
Iodobehenate.....	67
Lactate.....	69
Calcreose.....	70
Calomel.....	9
Camphor.....	62
Caramel.....	45
Carbon Disulfide.....	19
Tetrachloride.....	37
Carbromal.....	69
Cargentos.....	70
Carmine.....	26
Cerium Oxalate.....	43
Oxide.....	21
Charcoal, Activated.....	71
Chiniofon.....	60
Chloral Hydrate.....	34
Chloramine-T.....	67
Chlorbutanol.....	62
Chlorinated Lime.....	20
Chlorinated Paraffin.....	72
Chloroform.....	34
Chlorthymol.....	73
Chromium.....	19
Trioxide.....	19
Cinchonidine.....	41
Sulfate.....	41
Cinchonine.....	23
Sulfate.....	23
Cinchophen.....	55
Citrated Caffeine.....	66
Coal Tar.....	11
Cocaine.....	39
Hydrochloride.....	44

INDEX

	Page
Codeine.....	29
Sulfate.....	61
Colchicine.....	35
Collodion.....	39
Compound Effervescent Powders.....	23
Copper Sulfate.....	12
Cotarnine Chloride.....	39
Coumarin.....	45
Creolin.....	60
Creosote.....	33
Carbonate.....	60
Cresol.....	60
Dextrose.....	2
Dichloramine-T.....	72
Digitalin.....	41
Diluted Erythryl Tetranitrate.....	62
Dionin.....	65
Diuretin.....	59
Emetine.....	24
Ephedrine.....	56
Hydrochloride.....	73
Sulfate.....	73
Epinephrine.....	63
Epsom Salt.....	12
Erythryl Tetranitrate, Diluted.....	62
Ether.....	8
Ethyl Acetate.....	16
Aminobenzoate.....	71
Bromide.....	32
Carbamate.....	35
Chaumoograte.....	68
Chloride.....	15
Oxide.....	8
Ethylene.....	19
Ethylhydrocupreine Hydrochloride.....	68
Ethylmorphine Hydrochloride.....	65
Eucaine Hydrochloride.....	52
Eucalyptol.....	53
Eugenol.....	56
Eyphyllin.....	68
Exsiccated Sodium Arsenate.....	53
Ferric Glycerophosphite.....	61
Hypophosphite.....	58
Phosphate, Soluble.....	59
Pyrophosphate, Soluble.....	43
Fluorescein, Soluble.....	71
Formaldehyde.....	45

INDEX

	Page
Glauber's Salt.....	10
Glucose.....	2
Glycerin.....	17
Guaiacol.....	45
Carbonate.....	57
Hexamethyltetramine.....	65
Histamine Phosphate.....	71
Holocaine.....	63
Homatropine.....	52
Hydrobromide.....	51
Hydrasyine Hydrochloride.....	44
Hydrogen Peroxide.....	26
Hyoscine.....	59
Hyoscyamine.....	46
Ichthammol.....	51
Iodine.....	23
Iodized Phenol.....	61
Iodoform.....	29
Iodophthalein, Soluble.....	61
Iron.....	4
And Ammonium Citrate.....	55
Citrate.....	34
Peptonized.....	64
Reduced.....	42
Sulfate.....	37
Kaolin.....	13
Lactose.....	12
Lead Monoxide.....	2
Lime.....	1
Liquid Petrolatum.....	61
Litharge.....	2
Lithium Benzoate.....	49
Bromide.....	49
Carbonate.....	49
Citrate.....	49
Oxide.....	21
Salicylate.....	54
Loretin.....	60
Luminal.....	70
Sodium.....	70
Lysol.....	60
Magnesium.....	33
Carbonate.....	13
Oxide.....	15
Sulfate.....	12
Manganese Citrate, Soluble.....	65
Glycerophosphate.....	61
Hypophosphite.....	42

INDEX

	Page
Medinal.....	66
Menthol.....	3
Merbaphen.....	69
Mercuric Salicylate.....	51
Mercury.....	4
Bichloride.....	5
Succinimide.....	57
Methenamine.....	65
Methylene Blue.....	48
Methyl Alcohol.....	11
Iodide.....	36
Rosaniline.....	58
Salicylate.....	55
Methylthionine Chloride.....	48
Methyl Violet.....	58
Mild Silver Protein.....	70
Milk of Magnesia.....	42
Monobromated Camphor.....	43
Morphine.....	24
Hydrochloride.....	25
Sulfate.....	25
Naphthaline.....	27
Naphtol.....	38
Narceine.....	34
Narcotine.....	21
Neocarsphenamine.....	72
Neocinchophen.....	70
Nickel.....	14
Nicotine.....	66
Nitrobenzene.....	36
Nitrous Oxide.....	17
Novatophan.....	70
Novocaine.....	67
Oxygen.....	16
Papaverine.....	40
Hydrochloride.....	40
Paraffin, Chlorinated.....	72
Paraldehyde.....	52
Paratoluensulphonedichloramide.....	72
Pelletierine Tannate.....	50
Peptonized Iron.....	64
Petrolatum.....	50
Liquid.....	61
Petroleum Benzine.....	52
Phenacaine Hydrochloride.....	63
Phenacetine.....	56
Phenazone.....	53
Phenobarbital.....	70

INDEX

	Page
Phenol.....	36
Phenolphthaleine.....	49
Phenyl Salicylate.....	53
Pilocarpine.....	47
Hydrochloride.....	47
Nitrate.....	54
Piperine.....	62
Potassium Acetate.....	10
And Sodium Tartrate.....	11
Bicarbonate.....	15
Bromide.....	30
Carbonate.....	1
Chlorate.....	18
Chloride.....	44
Citrate.....	35
Ferrocyanide.....	14
Guaiacol Sulphonate.....	64
Hydroxide.....	35
Hypophosphite.....	43
Iodide.....	23
Nitrate.....	5
Permanganate.....	11
Sulfate.....	9
Thiocyanate.....	25
Precipitated Chalk.....	30
Phosphate of lime.....	31
Sulfur.....	14
Prepared Calamine.....	15
Chalk.....	1
Procaine Hydrochloride.....	67
Protargol.....	64
Pumice.....	2
Purified Talc.....	55
Pyramidon.....	63
Pyrogallol.....	18
Pyroxylin.....	40
Quicksilver.....	4
Quinidine.....	35
Sulfate.....	73
Quinine.....	27
And Urea Hydrochloride.....	49
Bisulfate.....	51
Dihydrochloride.....	60
Ethylcarbonate.....	64
Hydrobromide.....	48
Hydrochloride.....	28
Phosphate.....	28
Salicylate.....	50
Sulfate.....	29

INDEX

	Page
Red Mercuric Iodide.....	41
Red Mercuric Oxide.....	6
Rochelle Salt.....	11
Reduced Iron.....	42
Resorcin.....	44
Saccharin.....	56
Salicin.....	33
Salol.....	53
Santonin.....	33
Scarlet Red.....	67
Scopolamine.....	59
Hydrobromide.....	54
Seidlitz Powders.....	23
Silicium.....	30
Silver Nitrate.....	5
Protein, Mild.....	70
Protein, Strong.....	64
Sinigrin.....	44
Sodium.....	21
Acetate.....	14
Acid Phosphate.....	71
And Potassium Tartrate.....	11
Barbital.....	66
Benzoate.....	50
Bicarbonate.....	20
Biphosphate.....	71
Borate.....	4
Bromide.....	33
Cacodylate.....	65
Carbonate.....	3
Chloride.....	2
Citrate.....	40
Dioxide.....	12
Hydroxide.....	41
Hypophosphite.....	43
Iodide.....	36
Manganese Citrate.....	65
Nitrate.....	12
Nitrite.....	58
Perborate.....	67
Phosphate.....	20
Salicylate.....	48
Stearate.....	52
Sulfate.....	10
Thiocyanate.....	54
Thiosulfate.....	48

INDEX

	Page
Soluble Ferric Pyrophosphate.....	43
Fluorescein.....	71
Iodophthlalein.....	61
Ferric Phosphate.....	59
Phenobarbital.....	70
Solutol.....	60
Solveol.....	60
Sparteine Sulfate.....	41
Stannic Chloride.....	8
Strong Silver Protein.....	64
Strophanthin.....	46
Strontium.....	22
Bromide.....	58
Salicylate.....	54
Strychnine.....	26
Nitrate.....	27
Phosphate.....	26
Sulfate.....	26
Sublimed Sulfur.....	2
Sucrose.....	3
Sulfonmethane.....	56
Sulfonethylmethane.....	57
Sulphurated Potash.....	4
Talc, Purified.....	55
Tannigen.....	62
Terebene.....	55
Terpin Hydrate.....	31
Tetrachlorethylene.....	69
Theine.....	32
Theobromine with Sodium Salicylate..	59
Theocin, Soluble.....	66
Theophylline..	57
With Ethylene Diamine.....	68
With Sodium Acetate.....	66
Thyroxin.....	72
Tin.....	3
Trinitrophenol.....	20
Tryparsamide.....	72
Vanillin.....	47
Veronal.....	64
Vitriol.....	6
Yellow Mercurous Iodide.....	36
Yellow Oxide of Mercury.....	38
Zinc.....	7
Acetate.....	10
Chloride.....	38
Iodide.....	41
Oxide.....	14

INDEX

	Page
Zinc Phenolsulfonate.....	46
Stearate.....	22
Sulfate.....	7
Sulpho-carbolate.....	46

BIBLIOGRAPHY

A.M.A. Council on Pharmacy and Chemistry Reports

American Dispensatory

American Druggist

American Pharmaceutical Association Proceedings

Annals De Chimie Et De Physique

Army

Principles of Pharmacy

Bailey

Etymological Dictionary of Chemistry and Mineralogy

Berliner Jahrbuch der Pharmacie

Buchner, Dr. Johann Andreas

Repertorium für die Pharmacie

Chemical Gazette

Constantin, P.

Repertoire de Pharmacie

Deming, Horace G.

General Chemistry

Dragendorf, G.

Jahresbericht über die Fortschritte der Pharmacognosie

Druggist Circular

Felter & Lloyd

King's American Dispensatory

Flüchiger & Hanbury

Pharmacographia

BIBLIOGRAPHY

Flüchiger & Hanbury

Pharmacographia A History of Drugs

Gilbert, L. W.

Annalis der Physik

Gmelin, Leopold

Hand-Book of Chemistry

Grier, James

A History of Pharmacy

Hilditch, T.P.

A Concise History of Chemistry

Houben, J.

Fortschritte der Heilstoffchemie

Journal de Pharmacie et De Chimie

La Wall, Charles

4000 Years of Pharmacy

Lewis, William

Experimental History of Materia Medica

Lloyd, John Uri

Origin & History of all Pharmacopeial, Vegetable Drugs
and Chemicals

Lunge, Geo.

Coal-Tar and Ammonia

Musche & Hawley

A History of Chemistry

Merck's Annual Report

BIBLIOGRAPHY

New and Nonofficial Remedies

Pharmacopoea Edinburgensis 1722

Pharmacopoea Universales

Proceedings of the California Pharmaceutical Society

Proceedings of the Pennsylvania Pharmaceutical Association

Sadtler & Coblentz

Pharmaceutical & Medical Chemistry

Schelenz, H.

Geschichte der Pharmazie

Schmidt

Pharmaceutische Chemie

Stille and Maisch

The National Dispensatory

Surgeon-General's Index Catalogue

Taschenbuch für Scheidekünstler und apotheker auf das
Jahr 1801

Thompson, C. J. S.

Alchemy & Pharmacy

Thompson, C. J. S.

The Mystery and Art of the Apothecary

Thorpe, Edward

History of Chemistry

Thorpe, T. E.

Dictionary of Applied Chemistry

BIBLIOGRAPHY

Ullmann, Professor Dr. Fritz

Enzyklopädie der technischen chemie

Wagner & Frankel

Starch Glucose, Starch & Sugar & Dextrine

Watts, Henry

A Dictionary of Chemistry

Wood & Bache

Dispensatory of the U. S.

Wood-La Wall

United States Dispensatory

Wood, Remington, Sadtler

United States Dispensatory

Wooton, A.C.

Chronicles of Pharmacy

Year Book of Pharmacy and Transactions of the British

Pharmaceutical Conference

APPROVED BY W. S. Richtmann.
Prof. of Pharmacology