

BIBLIOGRAPHY

OF

ELASTICA

BY

FRANK GEORGE SCOBIE

UNIVERSITY OF WISCONSIN  
SCHOOL OF PHARMACY

A THESIS SUBMITTED FOR THE DEGREE OF  
GRADUATE IN PHARMACY

UNIVERSITY OF WISCONSIN

1932

Oviedo, G.

1536.

(Rubber)

Historia General y Natural de las Indias, p.----. (Hawks, Pioneers of Plant Study, p.119.)

(Gives first reference to rubber. Describes the "Indians" as playing a game called Batos, with balls, but of different material than that used by christians.)

---

Herrera, A.

1601-15.

(Rubber)

Historia General de los Hechos de los Castellanos, p.----. (Hawks, Pioneers of Plant Study, p. 120.)

(States that in the Island of Hayti, trees exist, that when tapped yield a milk which changes to a white gum and from which the natives made large balls that bounced well.)

---

Torquemada, J.

1615.

(Rubber)

De La Monarquia Indiana, p.----. (Hawks, Pioneers of Plant Study, p. 120.)

(Refers to the rubber tree by name of Ule, which is still the generic Mexican name for rubber plants. Mentions its use for waterproofing linen coats.)

---

De La Condamine, C. M.

1745.

(Rubber)

Relation Abregee d'un Voyage, etc; p.----. (Hawks, Pioneers of Plant Study, p. 120.)

(Describes, briefly, a tree called hevea, by the natives. States that when the tree is cut, a white milk-like substance runs out. Also describes some uses of it by natives.)

---

Priestly, J.

1761.

---

-----, ----, p.----. (Hawks, Pioneers of Plant Study, p. 121.)

(Describes the use of caoutchouc for rubbing out pencil marks.)

---

Aublet, F.

1775.

(*Hevea brasiliensis*).

Histoire des plantes de la Guiane, francaise, etc., p.----.  
(Hawks, Pioneers of Plant Study, p. 121; DeCandolle, Prodrumus, 15, pt. 2, p. 716.)

(Gave the rubber tree the genus name of *Hevea*.)

---

Linne, C.

1781.

(*Hevea brasiliensis*).

Muller Argenterati, 34, p. 204. (DeCandolle, Prodrumus, 15, pt. 2, p. 718.)

The original was not available.

---

Schreber, J. C. D.

1789.

(*Siphonia*).

Linne Genera Plantarum, 8 ed., p. 656. (DeCandolle, Prodrumus, 15, pt. 2, p. 716).

The original was not available.

---

Mackintosh, C.

1823.

---

-----, ----, p.----. (Hawks, Pioneers of Plant Study, p. 121).

(Discovered the solubility of rubber in benzene.)

---

Hancock, T. 1824.

On Preparation of Caoutchouc.

Quart. Jour. Sci., 17, p. 364. (Catalogue of Scientific Papers, 3, p. 159.)

Discusses several methods of preparing caoutchouc.

---

Humboldt, F.H.A.V., Bonpland, A., & Kunth, K.S. 1831.

(Siphonia).

Nova Genera et Species Plantarum, etc., 7, p. 171. (DeCandolle, Prodrumus, 15, pt., 2, p. 718.)

The original was not available.

---

Rowland, B.C. 1843.

India Rubber Court-Plaster.

Pharm. Jour., 2, p. 465. (Am. Jour. Pharm., 15, p. 38; U.S. Dispens., 9 ed., p. 1309.)

Describes a method of making India rubber court-plaster.

---

Hancock, T. 1850.

(Caoutchouc et gutta percha vulcanises ou volcanises).

Revue Scientifique, ---, p.----. (Repert. de Pharm., 6, p. 238; Jour. d Pharm. et de Chim., 45, p. 205; U.S. Dispens., 9 ed., p. 1309.)

(Describes the process of vulcanizing rubber.)

---

Wood, G.B., & Bache, F.

1851.

Caoutchouc.

U.S. Dispens., 9 ed., p. 1309; Ibid., 10 ed., p. 1308; Ibid., 11 ed., p. 1385; Ibid., 12 ed., p. 1484; Ibid., 13 ed., p. 1554; Ibid., 14 ed., p. 1604; Ibid., 15 ed., p. 1596; Ibid., 16 ed., p. 1598; Ibid., 17 ed., p. 483; Ibid., 18 ed., p. 476; Ibid., 19 ed., p. 428; Ibid., 20., p. 1367; Ibid., 21ed., p. 1286.

Briefly describes the extraction of the milky juice from plant. Gives some of physical and chemical properties of juice. Also method of making juice into rubber and some uses of the product.

---

Batut, N.

1852.

De L'emploi en Midecine et en Chirurgie du Caoutchouc Vulcanise.

J. de Med. Chir. et Pharm. de Toulouse N.S., 4, p. 261. (Index Surg. Gen. Lib., S. 1, V.2, p. 696.)

The original was not available.

---

King, J., & Newton, R.S.

1852.

Caoutchouc.

Eclec. Dispens., 1 ed., p. 103.

Gives brief history, properties and uses of India rubber.

---

Payen, M.

1852.

On the Sulphurization of Caoutchouc, and on Some Properties of Sulphur.

Chem. Gaz., 10, p. 193. (U.S. Dispens., 10 ed., p. 1308.)

Discusses the introduction of vulcanization into the rubber industry.

---

Spruce, R. 1855.

Note on the India-Rubber of the Amazon.

Jour. Bot., 6; p. 370. (Am. Jour. Pharm., 27; p. 546.)

Discusses the development of the rubber industry in the Amazon region.

---

Weddell, M. 1855.

On the Extraction of Caoutchouc.

Pharm. Jour., 15; p. 116. (Am. Jour. Pharm., 27; p. 542.)

Discusses several sources of rubber and methods of extracting the juice.

---

Dodge, H. 1857.

Vulcanized Caoutchouc.

Drugg. Circ., 1; p. 32.

Describes briefly a process for working up waste scraps of Caoutchouc into soft plastic masses.

---

(Editor) 1857.

The Elastic Gums.

(Am. Jour. Pharm., 29; p. 468.)

Discusses the importance of elastic gums in commerce.

---

Baillon, H.E. 1858.

(Hevea)

Etude Generale du Groupe de Euphorbiaceis, p. 324; t.14; fig. 39-41 etc., 15 fig. 1-11 excl. Syphonantho. (De Candolle, Prodionius, V. 15, pt. 2; p. 716.)

The original was not available.

---

(Editor)

1861.

India-Rubber for Keeping Water Pure.

Drugg. Circ., 5; p. 203.

Discusses the use of an India-Rubber keg as a water container compared to other containers.

---

Eulenberg, H.

1861.

Ueber Zingeholt des Vulkamsirten Kautschuks.

Beitr.-d. San. Pol., S. 1, V. 2; p. 2. (Index Surg. Gen. Lib., S. 1, V.2; p.696.)

The original was not available.

---

King, J.

1864.

Caoutchouc.

Am. Dispens., 5 ed; p. 187; Ibid., 6 ed., p. 187; Ibid., 8 ed., p. 181; Ibid., 10 ed., p. 181; Ibid., 15 ed., p. 181; Ibid., 16 ed., p. 181; Ibid., 18 ed., p. 181.

Gives a description, history, properties and uses of rubber.

---

(Editor)

1865.

A New Rubber Cement.

Drugg. Circ., 9; p. 127.

Describes a process for making an India-Rubber cement.

---

Appareils, ----.

1867.

En Caoutchouc.

Bull. Soc. Med. d'emmlat de Par. N.S., 1; p. 549. (Index Surg. Gen. Lib., S. 1, V. 2; p. 696.)

The original was not available.

---

(Editor) 1867.

A Superior Glue.

Drugg. Circ., 11; p. 18. (Am. Jour. Pharm., 39; p. 185; U.S. Dispens., 13 ed; p. 1556.)

Describes a superior grade of glue made with rubber and naptha.

---

Sarazin, C. 1867.

Caoutchouc.

N. Dict. de Med. et Chir. Prat., 6; p. 252. ( Index Surg. Gen. Lib., S. 1, V. 2; p. 696.)

The original was not available.

---

(Editor) 1868.

India-Rubber Sponge.

Chem. News., 3; p. 340. ( Drugg. Circ., 12; p. 46.)

Discusses briefly the India- Rubber sponge.

---

(Editor) 1869.

India-Rubber.

Drugg. Circ., 13; p. 59.

Discusses briefly the obtaining of the juice and its manufacture into rubber.

---

Mouton, M. 1870.

Vulcanized Caoutchouc.

Drugg. Circ., 14; p. 153.

Describes a process for softening vulcanized rubber, especially for printing ink rollers.

---

(Editor) 1871.

How to fasten Rubber to Wood and Metal.

Drugg. Circ., 15; p. 25.

Describes a process for fastening rubber to wood and metals.

---

Marquardt, M. 1871.

Artificial Ivory from Rubber.

Drugg. Circ., 15; p. 112.

Gives a process for making artificial ivory from rubber.

---

Worthington, J.W. 1871.

On the Use of Liquid Caoutchouc as an Addition to Emp.  
Belladonnae & other Plasters.

Am. Jour. Pharm., 43; p. 153.

Discusses the use of liquid Caoutchouc as an addition to  
Belladonna plaster and other plasters.

---

Collin, E. 1872.

(Hevea Braziliensis.)

Caoutchouc, t, V. 1. (Staph., Ind. Lond., 3; p. 398.)

The original was not available.

---

Donkin, W.F. 1872.

To cut and Bore India-Rubber Corks.

Chem. News, Lond., 26; p. 104. (Am. Jour. Pharm., 44; p. 561.)

Describes a method of cutting and boring India-Rubber Corks.

---

Girard, A.

1872.

A New Sweet Volatile Principle Found in Caoutchouc of Borneo.

Drugg. Circ., 16; p. 43.

Gives an account of the discovery of a saccharine substance designated as Bornesite.

---

(Editor)

1873.

Caoutchouc from Common Plant.

Drugg. Circ., 17; p. 209.

Discusses the demand for rubber goods, and also mentions new sources of supply.

---

Varick, T.R.

1873.

Paper on Caoutchouc as a Remedial Agent.

Med. Rec. N.Y., 8; p. 557. (Index Surg. Gen. Lib., S.1, V2; p. 696.)

Discusses the use of caoutchouc as a remedial agent.

---

Mettenheimer, C.

1874.

Ueber die Veranderunger, welche das Kautschuk der im Gerbranch befindlichen Sangflaschenhutschen in Seiner Structur erleiden kaun.

Memorabilien Heilbr., 19; p. 101. (Index Surg. Gen. Lib., S.1, V.2; p. 696.)

The original was not available.

---

(Editor) 1875.

Gutta-Percha Cement for Fastening Leather.

Drugg. Circ., 19; p. 113.

Gives a formula for making a rubber cement, which can be used for cementing leather.

---

Markham, C.R. 1875.

The Cultivation of Caoutchouc- Yielding Trees in British India.

Pharm. Jour., 35; p. 1013. (Drugg. Circ., 19; p. 54.)

Discusses the various sources and preparation of caoutchouc.

---

(Editor) 1876.

Cement for Leather & Rubber.

Drugg. Circ., 20; p. 30.

Gives a formula for a cement for leather and rubber goods.

---

(Editor) 1876.

Artificial India-Rubber.

New Rem., 5; p. 254.

Describes briefly a cheap substitute for India-Rubber.

---

(Editor) 1876.

Fraudulent Admixture of Rubber.

New Rem., 5; p. 238.

Describes briefly the substances with which rubber may be adulterated.

---

- (Editor) 1876.  
Artificial India-Rubber.  
Drugg. Circ., 20; p. 77.  
Describes a method for making an artificial rubber.
- 
- Saunders, W. 1876.  
On the Manufacture of Rubber from Milkweed.  
Drugg. Circ., 20; p. 148.  
Discusses the possibility of Milkweed as a source of rubber.
- 
- (Editor) 1877.  
Hard Rubber Vulcanite.  
Drugg. Circ., 21; p. 42.  
Discusses the use of rubber for making dental plates.
- 
- (Editor) 1877.  
Adulterating Rubber.  
Drugg. Circ., 21; p. 201.  
Discusses the use of barium salts as adulterants of rubber.
- 
- Hardy, M. 1877.  
India Rubber Cloth in Diseases of the Skin.  
Chem. & Drugg., 19; p. 409.  
Discusses the use of rubber cloth in treating skin diseases.
-

Lerchen, H. 1877.

(Adulteration of Rubber Nipples.)

Am. Jour. Pharm., 49; p. 138.

Reports that Zinc and Calcium were found in residue, after treating a rubber nipple with nitric acid.

---

Seabury, G. J. 1877.

India Rubber Plasters.

Chem. & Drugg., 19; p. 367.

Discusses the use of India rubber in making plasters.

---

Tollens, B. 1877.

"On the Noxiousness of Some Rubber Goods".

New Rem., 6; p. 18.

Mentions the noxious effects of some substances with which rubber is adulterated. Zinc Oxide especially mentioned.

---

(Editor) 1878.

India Rubber, Source in Gaboon of.

New Rem., 7; p. 274.

Discusses, briefly, export of Landolphia, a species of India-rubber, from Gaboon.

---

(Editor) 1878.

Rubber Shoe Varnish.

Drugg. Circ., 22; p. 29.

Gives a formula for making a rubber shoe varnish.

---

(Editor) 1878.

To Mend India-Rubber.

New Rem., 7; p. 151.

Gives a formula for mending India-rubber.

(Editor) 1878.

India-Rubber Varnish for Leather.

New Rem., 7; p. 184.

Gives a formula for preparing India-rubber varnish.

---

(Editor) 1878.

Impervious Rubber Tubing.

New Rem., 7; p. 333.

India rubber tubing may be made entirely impassable to coal gas by painting it with water glass.

---

(Editor) 1878.

To Incorporate Caoutchouc in Plasters.

Drugg. Circ., 22; p. 111.

Describes a method of incorporating caoutchouc into plasters.

---

Filhol, M.E. 1878.

Note sur l'existence de l'arsenic dans les bouchons et les tubes en caoutchouc vulcanise du commerce.

Repertoire de Pharmacie, S.N., V. 15; p. 537. (Drugg. Circ., 22; p. 33.)

Gives an account of the rise of Arsenic and antimony in vulcanizing rubber; the sulphides of Antimony being used for coloring the rubber.

---

(Editor)

1879.

Utilization of Waste Rubber.

Drugg. Circ., 23; p. 208.

Discusses, briefly, a method, patented in Germany, for utilizing waste rubber.

---

(Editor)

1879.

Artificial India-Rubber.

Drugg. Circ., 23; p. 151.

Gives directions for preparing an artificial India-rubber.

---

(Editor)

1879.

To Bore Caoutchouc.

Drugg. Circ., 23; p. 102.

Describes a method for boring caoutchouc.

---

(Editor)

1879.

To Unite India-Rubber.

Drugg. Circ., 23; p. 98.

Carbon bisulphide is used in making a cement for rubber.

---

(Editor)

1879.

Melting India-Rubber.

Drugg. Circ., 23; p. 82.

Tells how to melt and fuse rubber.

---

(Editor)

1879.

Artificial India-Rubber.

Drugg. Circ., 23; p. 79.

Describes a method for making an artificial rubber.

---

Linds, D.

1879.

Analysis of Caoutchouc.

Chem. news., 39; p. 99. (Jour. Chem Soc., 36; p. 559; Am. Jour. Pharm., 51; p. 460.)

Reports briefly on the analysis of caoutchouc.

---

Stille, A., & Maisch, J.M.

1879.

Resina Elastica.

Nat. Dispens., 2 ed., p. 1218; Ibid., 3 ed., p. 1295; Ibed 5 ed., p. 593.

Briefly discusses botanical origin, preparation, description, chemical composition, pharmaceutical, medical and surgical uses of rubber.

---

Allen, A.B.

1880.

Manufacture of Substitutes for Hard Rubber.

New Rem., 9; p. 285.

Discusses a patent formula for a substitute for hard rubber.

---

Bartlett, W.R.

1880.

On the Manufacture of India-Rubber Goods as Related to the Health of the Operatives.

Rep. Bd. Health Connect., 3; p. 31. (Index Surg. Gen. Lib., S.2, V.3; p. 151.)

The original was not available.

---

(Editor) 1880.

Cement for Rubber.

New Rem., 9; p. 281.

Discusses a process for making a cement for rubber.

---

(Editor) 1880.

Cement for Mending Rubber.

Drugg. Circ., 24; p. 41.

Tells of the use of bisulphide of carbon in making a cement for mending rubber.

---

(Editor) 1880.

To Preserve Rubber Instruments.

Drugg. Circ., 24; p. 211.

Describes how rubber instruments may be preserved.

---

(Editor) 1880.

To Cement Hard Rubber.

Drugg. Circ., 24; p. 204.

Shellac and pitch, melted together and applied hot, serve as a rubber cement.

---

(Editor) 1880.

India-Rubber Plasters.

Drugg. Circ., 24; p. 121.

Gives a formula for preparing an India-rubber plaster.

---

(Editor)

1880.

Stationers' India Rubber.

Drugg. Circ., 24, p. 112.

Tells how stationers India rubber is prepared by dissolving virgin India rubber in bisulphide of carbon, adding enough starch to form a plastic mass and evaporating.

---

(Editor)

1880.

Rubber Shoe Varnish.

Drugg. Circ., 24, p. 41.

Gives directions for making a rubber shoe varnish.

---

Gerner, H.

1880.

Manufacture of Vulcanized India-Rubber.

New Rem., 9, p. 285.

Discusses a patent on a mixture resembling India-rubber.

---

\_\_\_\_\_, \_\_\_\_.

1880.

(*Hevea brasiliensis*).

Garden, 18, p. 564. (Staph, Ind. Lond., 3, p. 398.)

The original was not available.

---

(Editor)

1881.

Cement for Rubber.

Drugg. Circ., 25, p. 87.

Mentions the use of shellac and ammonia as a cement in place of rubber.

---

Griffin, J. I. 1881.

India-Rubber Caps for Vials and Bottles.

New Rem., 10; p. 156.

Discusses the use of rubber caps for vials and bottles.

---

(Editor) 1882.

Recovery of Old Vulcanized Caoutchouc.

Drugg. Circ., 26; p. 1.

The pieces are heated in contact with steam and caoutchouc melts and is collected as a liquid. The product is used in preparing waterproof covers.

---

(Editor) 1882.

To Stamp Rubber Boots.

Drugg. Circ., 26; p. 136.

Finely powdered vermilion mixed with copal and dammar varnish and thinned with oil of turpentine, makes a good stamping medium.

---

Hempel, J.G. 1882.

Preservation of India-Rubber.

Drugg. Circ., 26; p. 160.

Describes how India-rubber may be preserved.

---

(Editor) 1883.

Softening of Hard Rubber Stoppers.

Drugg. Circ., 27; p. 45.

Tells how rubber stoppers may be softened.

---

(Editor) 1883.

To Patch Rubber Boots.

Drugg. Circ., 27; p. 57.

Gives directions for preparing a cement for patching rubber boots.

---

(Editor) 1883.

Preserving India-Rubber Goods.

New Rem., 12; p. 25.

Describes briefly a method for preventing rubber goods from hardening and cracking.

---

(Editor) 1883.

Rendering India Rubber Tubes Odorless.

Drugg. Circ., 27; p. 174.

Describes a method for rendering India-rubber tubes odorless.

---

(Editor) 1884.

India Rubber & Gutta Percha Cultivation in Ceylon.

Pharm. Jour., 43; p. 1052. (Am. Jour. Pharm., 56; p. 442.)

Describes the cultivation of India rubber and gutta percha in Ceylon.

---

(Editor) 1884.

To Make Rubber Stamps.

Drugg. Circ., 28, p. 91.

Describes a method for preparing rubber stamps.

---

(Editor)

1885.

Preventing Rubber Tubing from Getting Brittle.

Am. Drugg. 14, p. 233.

Describes a process for preventing rubber tubing from becoming brittle.

---

(Editor)

1885.

Cleaning New Rubber Corks & Tubing.

Am. Drugg., 14, p. 233.

Describes a process for cleaning rubber corks and tubing.

---

Biersdorf, P.

1886.

Ueber die Loslichkeit von Gummi elasticum in Aether.

Pharm. Centralt., 27, p. 221. (Am. Jour. Pharm., 58, p. 344.)

Describes a process of making a solution of rubber, more elastic and more agreeable than collodion.

---

(Editor)

1886.

Pres. de caoutchouc doux des plantes croissant in Allemagne.

Bull. Soc. Chim., 45, p. 698. (Drugg. Circ., 31, p. 40.)

Mentions the *Sonchus oleaceus* a French plant, as a possible source of rubber.

---

(Editor)

1886.

To Soften Rubber Nipples.

Drugg. Circ., 30, p. 40.

Describes a method to soften rubber nipples.

---

(Editor) 1886.

Cleaning New Rubber Corks and Tubing.

Drugg. Circ., 30, p. 93.

Describes a process for removing the coating from new rubber corks and tubes.

---

(Editor) 1886.

Rubber Stamps.

Drugg. Circ., 30, p. 230.

Gives a process for making rubber stamps.

---

Cooper, R.H. 1887.

Artificial Caoutchouc.

Chem. and Drugg., 30, p. 672.

Describes a method for making artificial caoutchouc.

---

Balland, M. 1887.

Vulcanized Rubber Instruments.

Am. Jour. Pharm., 59, p. 295.

Describes briefly the chemical changes which vulcanized rubber instruments undergo.

---

(Editor) 1887.

Rubber May be Fastened to Iron.

Am. Drugg., 16, p. 138.

Rubber may be fastened to iron by means of a paint prepared by macerating powdered shellac in twice its weight of concentrated Ammonia. Should stand 3 or 4 weeks before being used.

---

(Editor)

1887.

Rubber Plasters.

Am. Drugg., 16, p. 198.

Describes a good base for plasters made with prepared caoutchouc, Burgundy pitch and olibanum.

---

(Editor)

1887.

To Make Rubber Stamps.

Drugg. Circ., 31, p. 231.

Gives a method for making rubber stamps.

---

(Editor)

1887.

Rendering Rubber Tubing Clean & Preventing it from Getting Brittle.

Am. Drugg., 16, p. 137.

Describes the above mentioned process in detail.

---

(Editor)

1887.

Soft Rubber Cones.

Am. Drugg., 16, p. 75.

States that they can not be made on a small scale; and suggests that they be made by a manufacturer rather than by the individual.

---

(Editor)

1887.

Rubber & Acetic Acid.

Am. Drugg., 16, p. 55.

Suggests that some one carry out experiments with rubber and cold Acetic acid, to see how they act together.

---

Edmondson, J.J.

1887.

Medicated Plasters with Rubber.

Am. Jour. Pharm., 59, p. 375.

A brief article on medicated plasters containing rubber.

---

(Editor)

1888.

To Preserve Rubber Tubing.

Brit. & Col. Drugg., 13, p. 679.

To preserve rubber it should be washed occasionally with an alkaline solution.

---

\_\_\_\_\_ , \_\_\_\_\_ . 1888.

(Composition Filling for Rubber Goods.)

Revue Scientifique, \_\_\_\_\_ , \_\_\_\_\_. (Am. Jour. Pharm., 60, p. 512.)

(A brief account of a composition filling for rubber goods.)

---

Barnacle, G.

1889.

India Rubber.

Brit. & Col. Drugg., 16, p. 21.

Describes briefly, a method of assaying rubber for the amount of sulphur present.

---

(Editor)

1889.

The Collection & Preparation of Caoutchouc.

(Am. Drugg., 18, p. 221.

Discusses the rubber industry in general in South America.

---

Morellet, M. 1889.

Action of Glycerin upon Vulcanized Rubber.

Drugg. Circ., 33, p. 177.

States that vulcanized rubber, when dipped in boiling glycerin, is restored to its original condition.

---

Sach, C. 1889.

The Preservation & Testing of India Rubber & other apparatus.

Brit. & Col. Drugg., 16, p. 284.

Discusses some of the rubber appliances used by the pharmacist. Especially the examination, preservation and origin of these appliances.

---

(Editor) 1890.

India Rubber Trees.

Chem. & Drugg., 36, p. 682.

Fifteen million India rubber trees were to be planted in the State of Oaxoca, by the Government of Mexico.

---

(Editor) 1890.

India Rubber Goods.

Chem. & Drugg., 36, p. 668.

States that rubber goods were advanced in price by 10 percent on May 12th.

---

(Editor) 1890.

Further Notes on Caoutchouc Plaster.

Brit. & Col. Drugg., 17, p. 227.

Gives several formulas for making plasters of caoutchouc.

---

- (Editor) 1890.  
India-Rubber Plasters.  
Am. Drugg., 19, p. 128.  
Describes a process for making India-rubber plasters.
- 
- Gruning, W. 1890.  
Caoutchouc Plasters.  
Brit. & Col. Drugg., 17, p. 81.  
Gives several formulas for making rubber plasters.
- 
- Thompson, W. 1890.  
Vulcanized Rubber.  
Nat. Drugg., 17, p. 198.  
Discusses the vulcanization & decay of India-rubber.
- 
- (Editor) 1890.  
Cements of Rubber & Gutta-Percha.  
Am. Drugg., 19, p. 224.  
Describes a process for making a cement containing both rubber and gutta-percha.
- 
- (Editor) 1891.  
The Discovery of Rubber.  
Pharm. Era., 5, p. 74.  
Gives a brief history of the discovery of rubber.
-

(Editor)

1891.

Borax Solution of Rubber.

Nat. Drugg., 20, p. 145.

Discusses the preparation of a solution of rubber in borax emulsifying or simply by dissolving the raw gum in the solution.

---

(Editor)

1892.

India-Rubber Substitutes.

Brit. & Col. Drugg., 22, p. 39.

Tells of a new preparation which is used as a substitute for rubber.

---

(Editor)

1892.

Synthesis of Caoutchouc.

Am. Drugg., 22, p. 73.

Discusses isoprene a product of the destructive distillation of India-rubber and the possibility of preparing rubber from it.

---

Henriques, R.

1892.

(The Analysis of Rubber Goods.)

Chem. Zeit., 16, ----- (Analyst 18, p. 13; Am. Drugg., 24, p. 160.)

(Discusses several methods for analyzing rubber articles.)

---

Tschirch, A. 1892.

(*Hevea brasiliensis*).

Indische Heil. & Nutzpflanzen, t. 125. (Staph, Ind. Lond., p. 398.)

A picture showing the cultivation of rubber near Buitenzorg.

---

Holde, D. 1893.

The Analysis of Rubber Goods.

Analyst, 18, p. 147. (Am. Drugg., 24, p. 160.)

Suggests a method for determining the oil in rubber.

---

(Editor) 1894.

The Analysis of Rubber Goods.

Am. Drugg., 24, p. 160.

Discusses a method for analyzing rubber goods.

---

(Editor) 1894.

Elastic Rubber Varnish.

Bull. Pharm., 8, p. 454.

Gives a formula for an elastic rubber varnish.

---

(Editor) 1895.

To Render Rubber Gas Tubing Odorless.

Pharm. Era, 13, p. 590.

States that to deodorize rubber tubing apply a mixture of equal parts of 36% alcohol and a good linseed oil.

---

(Editor)

1895.

Restoring and Preserving Rubber Goods.

Pharm. Era, 13, p. 623.

Gives several formulas for the restoration and preservation of rubber goods.

---

(Editor)

1895.

Solvents for Para Rubber Solvents.

Pharm. Era, 13, p. 656.

Discusses several solvents for Para rubber.

---

(Editor)

1895.

Rubber in Plasters.

Pharm. Era, 13, p. 717.

Discusses the use of rubber in making rubber plasters.

---

(Editor)

1895.

Caoutchouc and Guttas.

Am. Jour. Pharm., 67, p. 174.

Discusses the relationship between caoutchouc and guttas.

---

(Editor)

1895.

Rubber Tree Seeds.

Brit. & Col. Drugg., 28, p. 487.

States that although the rubber tree of Assam is one of the largest in the forest its seeds are so small that one pound of them numbered 270,000.

---

Dybrowski, M. 1895.

(Disappearance of Rubber-Producing Plants.)

Institut. Agronomique, ---; ---. (Nat. Drugg., 25, p. 297.)

Discusses the disappearance of rubber-producing plants in the equatorial regions of the globe.

---

Roxburgh, W. 1895.

Ficus Elastica.

Am. Jour. Pharm., 67, p. 133.

Gives the amounts of rubber imported into England and the United States during 1893.

---

(Editor) 1896.

Dissolving Rubber.

Drugg. Circ., 40, p. 255.

Gives several solvents for India-rubber.

---

(Editor) 1896.

Rubber Industry in Lagos.

Am. Jour. Pharm., 68, p. 212.

Describes the rubber industry in Lagos, and its growing importance.

---

(Editor) 1896.

The India Rubber Industry in South America.

Am. Drugg., 28, p. 54.

Discusses the rubber industry in South America especially in the Guianas (British and French.)

---

(Editor)

1896.

India-Rubber from the Soudan.

Brit. & Col. Drugg., 29, p. 422.

States that India-rubber is of value and is received in payment of taxes in Soudan. This is done to encourage the cultivation of the plant.

---

(Editor)

1896.

Rubber.

Montr. Pharm. Jour., 7, p. 347.

Discusses the botanical source, uses and processes of manufacture of rubber.

---

(Editor)

1896.

India-Rubber and Gutta-Percha.

Montr. Pharm. Jour., 7, p. 334.

Gives a comparison of these two products.

---

Hill, S. H.

1896.

Pharmaceutical Associations.

Am. Jour. Pharm., 68, p. 404.

Discusses the softening of rubber by allowing it to soak in benzin a short time.

---

Medberry, H. W.

1896.

The Manufacture of Rubber Plasters.

Montr. Pharm. Jour., 7, p. 32.

Discusses the history, manufacture and use of rubber plasters.

---

Pearson, H. R.

1896.

Reclaiming Old Rubber.

Drugg. Circ., 40, p. 165.

Describes a simple process for reclaiming old rubber.

---

-----,-----.

1896.

Rubber Adhesive Plaster.

Merck's Report, 5, p. 335.

Gives a formula for a rubber adhesive plaster.

---

(Editor)

1897.

Rubber Manufacturers Organize.

Am. Drugg., 31, p. 191.

Discusses the organization of the manufacturers of druggists rubber sundries.

---

(Editor)

1897.

Higher Price for Rubber.

Am. Drugg., 31, p. 349.

Discusses an advance of 10 % in prices by druggists rubber sundries manufacturers.

---

(Editor)

1897.

Rubber Substitutes.

Montr. Pharm Jour., 8. p. 211.

Discusses several substitutes for rubber.

---

(Editor) 1897.

Limitations of the Rubber Supply.

Montr. Pharm. Jour., 8, p. 113.

Discusses the limited supply of rubber.

---

(Editor) 1897.

India-Rubber a Necessity of Civilization.

Montr. Pharm. Jour., 8, p. 18.

Claims that India-rubber is one of the prime necessities of civilization.

---

(Editor) 1897.

Rubber from the Australian Tropics.

Chem. & Drugg., 51, p. 256.

Tells how the rubber industry in Australia is being built up.

---

(Editor) 1898.

Preservation of Rubber Goods.

Am. Drugg., 32, p. 342.

Describes a method for preserving rubber.

---

(Editor) 1898.

India-Rubber.

Chem. & Drugg., 52, p. 371.

Describes the efforts that the government of French Soudan is making to develop the rubber industry.

---

\_\_\_\_\_, \_\_\_\_\_. 1898.  
(*Hevea brasiliensis*).  
Tropenflanzer, 2, p. 271. (Staph, Ind. Lond., 3, p. 398.)  
The original was not available.

\_\_\_\_\_  
Biffen, R.H. 1899.  
Methods of Preparing Rubber.  
Pharm. Era, 22, p. 15.  
Discusses several methods of preparing rubber. Also gives an analysis of the rubber from *Hevea brasiliensis*.

\_\_\_\_\_  
(Editor) 1899.  
Natural and Artificial Rubber.  
Am. Jour. Pharm., 71, p. 191.  
Describes natural and artificial rubbers and their preparation.

\_\_\_\_\_  
(Editor) 1899.  
Deodorization of Rubber Rings.  
Am. Drugg., 35, p. 171.  
Describes a process for deodorization of rubber rings.

\_\_\_\_\_  
(Editor) 1899.  
A New Convenience in Rubber Plasters.  
Am. Drugg., 35, p. 229.  
Describes a process for cutting rubber plasters as desired.

Hooper, D. 1899.

On Three Natural Rubber Substitutes.

Brit. & Col. Drugg., 36, p. 101.

Describes the botanical sources of three natural elastic gums collected in India.

---

Zingler, M. 1899.

To Restore Deteriorated Vulcanized Rubber to Usefulness.

Chem. Centralb., 70, p. 856. (Nat. Drugg., 30, p. 55.)

Gives a formula for restoring rubber which has become brittle.

---

Branch, G. F. 1900.

Rubber; Its Origin and Sources.

Am. Drugg., 38, p. 76.

Discusses the rubber industry in the Amazon River section and around Para, in South America.

---

D'Arsonvol, ----. 1900.

Rubber and Gases.

Pharm. Jour., 63, p. 397. (Montr. Pharm. Jour., 11, p. 18.)

Discusses the permeability of rubber to gases.

---

(Editor) 1900.

India-Rubber Trees.

Brit. & Col. Drugg., 37, p. 10.

States that large tracts of rubber trees are said to abound in the state of Balua, Brazil. Supply is unavailable because of difficulty of transportation.

---

(Editor)

1900.

Rubber Chemical Company (Limited).

Chem. & Drugg., 56, p. 807.

States that a company has been organized to carry on the business of producers & workers of so-called "reclaimed India rubber" and of all chemicals for mixing with India-rubber.

---

Scholl, R.

1900.

(Rubber Mortar Cap.)

Chem. Zeitg., 24, p. 15. ( Canad. Drugg., 12, p. 206.)

(Describes a rubber cap used to cover mortars.)

---

\_\_\_\_\_, \_\_\_\_\_.

1900.

(Hevea braziliensis)

Semaine Hort. 4, p. 369. (Staph, Ind. Lond., V3; P. 399.)

The original was not available.

---

Branch, G.T.

1901.

Rubber; Its Origin & Sources.

Pharm. Jour., 66, p. 84. ( Pharm. Era, 25, p. 172.)

Discusses the sources of the different kinds of rubber. Also discusses the Assay & composition, and impurities in India-rubber.

---

(Editor)

1901.

Matrix Material for Rubber Stamps.

Am. Drugg., 38, p. 142.

Gives a formula which can be used in making rubber stamps.

---

(Editor) 1901.

The Discovery of Vulcanized Rubber.

Am. Drugg., 39, p. 5.

Relates , briefly, the discovery of vulcanized rubber by Goodyear.

---

(Editor) 1901.

The Rubber Crop of Brazil.

Montr. Pharm. Jour., 14, p. 89.

States that there is a decrease in the production of rubber in Brazil.

---

(Editor) 1901.

A Substitute for Rubber.

Chem. & Drugg., 58, p. 936.

Discusses, briefly, a cheap substitute for rubber, called "solicum".

---

Neger, J. 1901.

The Culture of Rubber Plants.

Am. Drugg., 38, p. 296.

Discusses the rating in the production of rubber- for each of the rubber producing countries. Also discusses the quality of the rubber of each country.

---

\_\_\_\_\_, \_\_\_\_\_. 1901.

(*Hevea brasiliensis*.)

Rev. Cult. Colon., V.9; p. 134. (Staph, Ind., Lond., 3; p. 399.)

The original was not available.

---

De Jauville, ----.

1902.

*Hevea braziliensis*.

Plantes Utiles Pays chouds, t. 79. (Staph, Ind. Lond., V.3; p. 399. )

The original was not available.

---

(Editor)

1902.

To Blacken Faded Black Rubber.

Merck's Report; 11, p. 246.

States that it is doubtful if any process is known by which a jet black color could be imparted to faded rubber.

---

Schneider, M.

1902.

Rubber.

Am. Drugg., 40, p. 102.

Describes a method of obtaining the milky juice from plants and the conversion of this juice into rubber.

---

(Editor)

1903.

Artificial Rubber.

Am. Drugg., 43, p. 307.

Describes a process for the manufacture of synthetic rubber.

---

(Editor)

1903.

Preparation of Rubber at Lagos.

Brit. & Col. Drugg., 44, p. 456.

States that the secretary of Lagos Stores, Limited, sent a report to the african Trade Section of the Liverpool chamber of commerce, to the effect that something should be done to teach the natives how to extract rubber.

---

(Editor)

1903.

Rubber & Gutta-Percha in the Malay States.

Brit. & Col. Drugg., 44, p. 382.

Describes the rubber and gutta-percha industry in the Malay States.

---

(Editor)

1903.

The Rise in Rubber.

Brit. & Col. Drugg., 44, p. 361.

Describes the advances made in the use of rubber, as a prime cause in the increase in price of rubber.

---

(Editor)

1903.

The Rise in Rubber.

Brit. & Col. Drugg., 44, p. 353.

Presents views and interviews on hot water bottles, enemas, and similar articles, in regard to advance in price.

---

(Editor)

1903.

Artificial Rubber.

Pharm. Era, 30, p. 366.

Discusses a process for the manufacture of "synthetic caoutchouc".

---

(Editor)

1903.

Methods of Preparing Rubber Plasters.

Chem. & Drugg., 63, p. 471.

Discusses the preparation of rubber plasters by the Mechanical Roller-pressure method.

---

Roneburgh, J. 1903.

(*Hevea braziliensis*.)

Pl. Caoutchouc & Gutta-Percha Cult. Ind. Nierl. t.6  
(Staph, Ind. Lond., V.3; p. 399.)

The original was not available.

---

Sherman, P.L. 1903.

(*Hevea brasiliensis*).

Gutta-Percha & Rubber Phillip. Islands, p.---. (Dep. Int. Bur.  
Gov't. Lab. Bull., No. 7., Fig. 41, p. 40; Staph, Ind. Lond.,  
3, p. 399.)

The original was not available.

---

Weber, C.O. 1903.

The Composition of India Rubber.

Drugg. Circ., 47, p. 152.

Mentions various constituents of India-rubber.

---

\_\_\_\_\_, \_\_\_\_\_. 1903.

(*Hevea brasiliensis*).

Malpighia, 17, t. 16. (Staph, Ind. Lond., 3, p. 399.)

The original was not available.

---

(Editor) 1904.

The Rubber Position.

Brit. & Col. Drugg., 46, p. 274.

Gives statistics on the advance in price of rubber goods.

---

(Editor)

1904.

The Rubber Situation.

Brit. & Col. Drugg., 45, p. 44.

Gives facts concerning the rubber situation and its effects on wholesale prices.

---

(Editor)

1904.

Rubber Supply Short.

Montr. Pharm. Jour., 15, p. 373.

Tells of the limited supply of rubber available in the Phillipines and Amazon regions.

---

(Scheil, V.)

1904.

Limpid Gum Elastic Varnish.

Nat. Drugg., 34; p. 167.

Gives a formula for a limpid varnish containing rubber.

---

\_\_\_\_\_, \_\_\_\_.

1904.

*Hevea braziliensis*.

Bull. Econ. Indo-Chine N. Ser., v. 22; p. 847.

The original was not available.

---

\_\_\_\_\_, \_\_\_\_.

1904.

(*Hevea braziliensis*.)

Gorticoa, Venezuela p. 158. (Staph, Ind. Lond., v. 3, p. 399.)

The original was not available.

---

Parkin, J. 1904.

*Hevea brasiliensis*.

Annals Bot., 18, t. 16, p. 227. (Staph, Ind. Lond., 3, p. 399.)

Illustrations of different parts of the plant *Hevea brasiliensis*. Includes a young shoot from the tree, the upper surface of a foliage leaf, the honey-secreting epithelium of a bud-scale, etc.

---

Britton, A.B. 1905.

Rubber.

Brit. & Col. Drugg., 47, p. 358.

Gives a short history of rubber.

---

(Editor) 1905.

The Rubber Industry in the Malay States.

Brit. & Col. Drugg., 48, p. 371.

Describes the advances made in the cultivation of rubber in the Malay States.

---

(Editor) 1905.

Rubber Cultivation.

Brit. & Col. Drugg., 48, p. 175.

Gives an account of the increase in the cultivation of rubber plants.

---

(Editor) 1905.

A New Source of Rubber.

Brit. & Col. Drugg., 47, p. 632.

Announces the discovery of a new source of rubber in north western Madagascar from the plant *Euphorbia elastica*.

---

(Editor)

1905.

Rubber Cultivation.

Brit. & Col. Drugg., 47, p. 40.

Gives statistics on the export of rubber from French Guinea.

---

Jerome, C.

1905.

Rubber in Mexico.

Brit. & Col. Drugg., 48, p. 41.

Gives an account of the rubber industry in Mexico.

---

Metzger, G.

1905.

India-Rubber-- Its Origin and Preparation.

Am. Drugg., 47, p. 201.

Describes the rubber industry generally and particularly in South America, Africa and Asia.

---

1905.

Rubber Composition.

Bull. Pharm., 19, p. 351.

Gives a formula for a composition rubber.

---

1905.

(*Hevea braziliensis*).

Bull. Econ. Indo-Chine N. Ser., 43; p. 690 & 715. (Staph, Ind. Lond; v. 3; p. 399.)

The original was not available.

---

\_\_\_\_\_ , \_\_\_\_\_ . 1905.

(*Hevea brasiliensis*).

Trop. Agric., 24, No. 8, p. 42; 25, No. 2, p. 306; & No. 3, p. 496. (Staph, Ind. Lond., 3, p. 399.)

The original was not available.

\_\_\_\_\_ .  
Dunstan, W.R.

1906.

The Position of Rubber.

Brit. & Col. Drugg., 50, p. 114.

A commentary on the status of rubber chemical research.

\_\_\_\_\_ .  
(Editor)

1906.

Rubber Growing in Siam.

Am. Drugg., 48, p. 29.

Gives an account of the production of rubber in Siam.

\_\_\_\_\_ .  
(Editor)

1906.

Rubber Coin Mat Novelties.

Drugg. Circ., 50, p. 99.

Describes various types of mat novelties which are on the market.

\_\_\_\_\_ .  
(Editor)

1906.

Rubber in Angola.

Brit. & Col. Drugg., 50, p. 199.

Discusses the decline of the rubber industry in Angola.

\_\_\_\_\_ .

(Editor)

1906.

A New Source of Rubber.

Bull. Pharm., 19, p. 83.

Describes a plant found in Colorado as a new source of rubber.

---

Lavoura, A.

1906.

(*Hevea brasiliensis*).

Bol. Soc. Nac. Agric., Rio de Janeiro, 10, p. 184. (Staph, Ind. Lond., 3, p. 399.)

The original was not available.

---

Pobequin, F.

1906.

(*Hevea brasiliensis*).

Flora Guineense Francaise, t. 69. (Staph, Ind. Lond., 3, p. 399.)

The original was not available.

---

\_\_\_\_\_, \_\_\_\_.

1906.

Solution of Rubber for Surgical Work.

Am. Drugg., 49, p. 277.

Gives several formulas for solutions of rubber for surgical work.

---

\_\_\_\_\_, \_\_\_\_.

1906.

(*Hevea brasiliensis*).

Teysmannia, 16, p. 382. (Staph, Ind. Lond., 3, p. 399.)

The original was not available.

---

(Editor)

1907.

Coating Silk with Rubber.

Drugg. Circ., 51, p. 312.

Describes a method for coating silk with rubber.

---

Guerin, M.G.

1907.

Preservation of India-Rubber.

Chem. & Drugg., 70, p. 798. (Drugg. Circ., 51, p. 640.)

India rubber tubes can be preserved by treating them with two coats of a syrupy solution of Para rubber in benzin.

---

Henry, Y.

1907.

(Hevea braziliensis.)

Caoutch. Afr. Occ. France. t. 10, p. 197. (Staph, Ind. Lond., V.3, p. 399.)

The original was not available.

---

Laurent, E.L.

1907.

Hevea braziliensis.

De Wildeman, V.1, p. 137. (Staph, Ind. Lond., V.3, p. 399.)

The original was not available.

---

1907.

\_\_\_\_\_, \_\_\_\_\_.  
( Hevea briziliensis.)

Teysmannia, 18, p. 168. (Staph, Ind. Lond; V.3, p. 399.)

The original was not available.

---

1907.

(*Hevea brasiliensis*).

Trop. Agric., 29, No. 4, p. 307; & No. 5, p. 314. (Staph, Ind. Lond., 3, p.399.)

The original was not available.

---

(Editor)

1908.

New Source of Rubber.

Brit. & Col. Drugg., 52, p. 394. (Merck's Report, 17, p. 13. )

Describes *Bleckrodea tonkinensis* as a new source of rubber.

---

(Editor)

1908.

A Question of Unfair Competition.

Chem. & Drugg., 72, p. 550.

Reports a law suit brought against a pharmacist of Paris, France, for selling rubber goods.

---

(Editor)

1908.

A Slump in Rubber.

Am. Drugg., 52, p. 59.

Discusses a slump in the price of raw rubber during the year.

---

Fellows, E.W.

1908.

Freshening Up Rubber Goods.

Bull. Pharm., 22, p. 251. (Merck's Report, 17, p. 186.)

States that to freshen up rubber goods they should be wiped with a flannel cloth slightly moistened with gasoline.

---

- Rusby, H.H. 1908.  
A New Source of Rubber.  
(Am. Drugg., 53, p. 261.)  
Discusses a new source of rubber other than that of guayale or rubber shrub.
- 
- Smith, E.A. 1908.  
A Walk through Kamuning Estate.  
Chem. & Drugg., 72, p. 137.  
Describes the types of rubber trees encountered. Methods of extracting the juice & the factory in which rubber goods were manufactured.
- 
- Tschirch, A. 1908.  
Hevea braziliensis.  
Haudb: Pharmakog., V. 1, p. 40. (Staph, Ind. Lond; V.3, p. 399.)  
Reproduces an illustration from the Kew Museum entitled "Rubber-Plantage von Hervea Braziliensis. (Para Rubber tree) in Heneratgoda (Ceylon)"
- 
- Beille, L. 1909.  
( Hevea braziliensis.)  
Precis de botanique pharmaceutique, 2, p. 548. (Staph, Ind. Lond., 3, p. 399.)  
The original was not available.
- 
- (Editor) 1909.  
Cold Vulcanizing Process.  
Chem. & Drugg., 74, p. 844.  
In this process the rubber articles are dipped in a one percent sulphur chloride solution.
-

(Editor)

1909.

The Manufacturers of Rubber Goods in the United States.

Chem. & Drugg., 74, p. 325.

Discusses an agreement made by the manufacturers not to replace rubber goods unless an actual fault exists.

---

(Editor)

1909.

Rubber Substitutes in British India.

Nat. Drugg., 39, p. 221.

Comments on a substitute for rubber obtained from a cactus plant known as "enphorbia".

---

(Editor)

1909.

Rubber.

Brit. & Col. Drugg., 56, p. 406.

Discusses the fluctuations in price of rubber in the market.

---

(Editor)

1909.

Another Advance in Rubber Goods.

Am. Drugg., 55, p. 271.

Comments on an additional advance in price of rubber goods.

---

(Editor)

1909.

The Advance in Rubber Goods.

Am. Drugg., 55, p. 208.

Discusses the advance in price of rubber sundries and gives reasons for it.

---

Treub, M.

1909.

*Hevea brasiliensis*.

Ann. Jard. Bot. Buitenzorg, 23, t. 4, fig's. 18 & 19. (Staph, Ind. Lond., 3, p. 399.)

Fig. 18 shows the narrow leaved variety of *Hevea brasiliensis*. Fig. 19 shows the abnormal leaf, of which only the middle leaflet has developed and the lateral ones' are replaced by thorn-like appendages.

---

\_\_\_\_\_ , \_\_\_\_\_ . 1909.

(*Hevea brasiliensis*).

Agric. Colon., Italy, 3, p. 320. (Staph, Ind. Lond., 3, p. 399.)

The original was not available.

---

Beadle, C., & Stevens, H.P.

1910.

Analysis of Vulcanized Rubber Goods.

Analyst, 35, p. 11. (Ind. Surg. Gen. Lib., S. 3, V. 3, p. 840.)

Gives several methods for analyzing vulcanized rubber goods.

---

(Editor)

1910.

The High Price of Rubber.

Am. Drugg., 56, p. 131.

Discusses the high price of rubber and the probable causes for it.

---

\_\_\_\_\_ , \_\_\_\_\_ . 1910.

(*Hevea brasiliensis*).

Bull. Agric. Congo Belge, 1, p. 253. (Staph, Ind. Lond., 3, p. 399.)

The original was not available.

---

Reinhardt, L.

1911.

*Hevea braziliensis*.

Kultiugesch. Nutzpfl. Erde und Kultur, V.4 pt. 2, t. 107, 108.  
(Staph, Ind. Lond., V.3, p. 399.)

The original was not available.

---

Werner, E.

1911.

*Hevea briziliensis*.

Kaiser- Wilhelms- Land p. 87. (Staph, Ind. Lond., V.3, p. 399.)

The original was not available.

---

Wettstein, W.

1911.

*Hevea braziliensis*.

Haudb. Syst. Bot., Ed.2, p. 527. (Staph, Ind. Lond., V.3,  
p. 399.)

The original was not available.

---

\_\_\_\_\_, \_\_\_\_\_.

1911.

*Hevea briziliensis*.

Phillippine Jour., Sc. Chem., & Geol., V.6, p. 329;  
t. 7. (Syaph, Ind. Lond., V.3, p. 399.)

The original was not available.

---

Campbell, J.S.

1912.

Seagumite, an artificial Rubber from Seaweed.

Jour. Indust. & Eugin. Chem., 4, p. 542. (Merck's Report,  
21, p. 251.)

Discusses the production of "seagumite," an artificial  
rubber.

---

- Mahin, F.W. 1912.  
Artificial-Rubber Production.  
Daily Consular Rep., 143, p. 1177. (Merck's Report, 21, p. 250.)  
Comments on the production of artificial rubbers. It is said to have some advantages over genuine rubbers.
- 
- Miers, M. 1912.  
Rubber As It Concerns the Retail Druggist.  
Am. Jour. Pharm., 84, p. 519.  
Discusses care, composition etc; of rubber goods which are handled in the drug store.
- 
- (Editor) 1913.  
The Rubber Situation.  
Brit. & Col. Drugg., 64, p. 544.  
Comments on price changes in the rubber market.
- 
- France, F. 1913.  
(*Hevea briziliensis*).  
Liben Pflanze, V.6; p. 197, 285. (Staph, Ind. Lond., V.3; p. 399.)  
The original was not available.
- 
- \_\_\_\_\_, \_\_\_\_\_. 1913.  
(*Hevea briziliensis*).  
Rec. Trav. Bot. Nierl., 10., t.4. (Staph, Ind. Lond., V.3, p. 399.)  
The original was not available.
-

Geare, R. I. 1914.

The Cultivation of Rubber, With Special Reference to Central America.

Merck's Report, 23, p. 56.

Discusses the rubber industry with special reference to development in Central America.

---

Karsten, G. K. W. H. & Schenck, H. 1914.

(*Hevea braziliensis*).

Vegetations Bilder, v. 12; t. 31. (Staph, Ind. Lond. v. 3., p. 399.)

The original was not available.

---

(Editor) 1915.

Coloring Red Rubber Black.

Pharm. Era, 48, p. 163.

States that it is practically impossible to color red rubber black.

---

(Editor) 1915.

"Discovering" Rubber Goods Department.

Pharm. Era, 48, p. 381.

Gives reasons why better merchandising methods are making rubber goods a leader in many drug stores.

---

\_\_\_\_\_, \_\_\_\_\_. 1915.

How Rubber Sponges are Made.

Bull. Pharm., 30, p. 494.

Describes the process by which rubber sponges are made.

---

(Editor)

1917.

Preservation of Rubber Gloves.

Chem. & Drugg., 89, p. 52.

Recommends the use of distilled water as a preservative for rubber gloves.

---

1917.

Rubber Plasters.

Chem. & Drugg., 89, p. 52.

Gives a formula for and directions for making a rubber plaster.

---

(Editor)

1919.

Production of Rubber in Fiji Islands.

Nat. Drugg., 49, p. 21.

Comments the increase in the rubber industry in the Fiji Islands.

---

(Editor)

1919.

New Rubber Factory in Mexico.

Nat. Drugg., 49, p. 484.

Announces the construction of a new rubber factory in Mexico, for the purpose of manufacturing automobile tires and inner tubes.

---

(Editor)

1921.

Rubber Goods Guarantees.

Bull. Pharm., 35, p. 264.

Gives the guaranty which Crowley, Milner & Company of Detroit gives with each piece of rubber goods sold.

---

Blackard, W.

1922.

Possibilities of Rubber Latex in the Manufacture of Paper.

Nat. Drugg., 52, p. 279.

Describes the use of rubber latex in making paper.

---

(Editor)

1922.

Rubber Latex in Paper Making.

Am. Drugg., 70, p. 46.

Comments on the use of rubber latex for making paper.

---

Moreton, J. H.

1922.

A World of Rubber.

Am. Drugg., 70, p. 48.

A general and popular history of the rubber industry.

---

\_\_\_\_\_, \_\_\_\_\_.  
Rubber Cement.

1922.

Bull. Pharm., 36, p. 527.

Gives a formula for a rubber cement.

---

(Editor)

1923.

The Composition of Crude Rubber.

Am. Drugg., 71, p. 39.

Summarize the information on the composition of different kinds of crude rubber.

---

(Editor)

1923.

Gutta-Percha Preparations and Rubber Deodorant.

Nat. Drugg., 53, p. 277.

Gives a number of gutta-percha preparations and also a method for deodorizing rubber.

---

Mitchell, N.

1923.

Selling Hot Water Bottles.

Drugg. Circ., 67, p. 439.

Discusses selling hot water bottles; how they are made; difference between low and high priced stock; display; care; kind of guarantee; etc.

---

Tuttle, J. B.

1923.

The Analysis of Rubber.

Am. Drugg., 71, p. 40.

Comments on the constituents of crude rubber other than Hydrocarbons. Chiefly resins and insoluble matter.

---

Cadwell, S. M.

1925.

Proper Care of Rubber Goods During Storage.

Am. Drugg., 73, p. 14.

Gives several precautions which should be taken with rubber goods which are in storage.

---

\_\_\_\_\_, \_\_\_\_\_.  
1925.

Rubber Glove Lubricant.

Bull. Pharm., 39, p. 439.

Gives a formula for a rubber glove lubricant.

---

Scheil, H. F.

1926.

Why Rubber Prices Are Up.

Bull. Pharm., 40, p. 182.

Tells of the higher price in rubber goods and gives plausible reasons for the increased price.

---

(Editor)

1929.

Imported Rubber Goods.

Brit. & Col. Pharm., 82, p. 80.

Discusses the desirability of marking of imported rubber goods, especially as to the place which should be marked.

---

Pickles, S. S.

1929.

Rubber Manufacture.

Brit. & Col. Pharm., 82, p. 403.

Gives an account of the history of rubber, its use, etc.

---

Garner, T. L.

1930.

New Chemical Outlets in the Rubber Industry.

Chem. Mark., 26, p. 249. (Nat. Drugg., 60, p. 238.)

Discusses the rubber industry from the chemical standpoint. Especially products resulting from the use of chemicals with rubber.

---

List of Journals Consulted.

- Am(ericana) Drugg(ist), v. 13-21; 1884-1891.
- Am(ericana) Drugg(ist) & Pharm(aceutical) Rec(ord), v. 22-72;  
1892-1924.
- Am(ericana) Drugg(ist), v. 73-82; 1925-1931.
- Am(ericana) Jour(nal of) Pharm(acy), v. 1-102; 1829-1930.
- Brit(ish) & Col(onial) Drugg(ist), v. 12-84; 1887-1931.
- Bull(etin of) Pharm(acy), v. 7-42; 1893-1928.
- Bull(etin of the) Am(ericana) Pharm(aceutical) Assoc(iation), v.  
1-6; 1906-1911.
- Chem(ist) & Drugg(ist), v. 1-112; 1859-1930.
- Dig(est of) Com(ments on the) U.S.P. & N.F.; 1905-1922.
- Drugg(ist), v. 2-6; 1880-1884.
- Drugg(ists) Circ(ular), v. 1-73; 1857-1929.
- Jour(nal of) Mat(eria) Med(ica), v. 1-19; 1857-1880.
- Jour(nal of the) Am(ericana) Pharm(aceutical) Assoc(iation),  
v. 1-18; 1912-1929.
- Merck's Archives, v. 1-16; 1899-1914.
- Merck's Report, v. 2-39; 1893-1930.
- Meyer Bro(ther) Drugg(ist), v. 9-54; 1890-1931.
- Midl(and) Drugg(ist), v. 1-60; 1899-1926.
- Midl(and) Drugg(ist) & Pharm(aceutical) Rev(iew), v. 43-61;  
1909-1927.
- Montr(eal) Pharm(aceutical) Jour(nal), v. 4-40; 1893-1929.
- N(ational) A(ssociation of) R(etail) D(ruggist's) Notes,  
v.1-16; 1902-1913.

- N(ational) A(ssociation of) R(etail) D(ruggist's) Jour(nal),  
v. 18-52; 1914-1931.
- Nat(ional) Drugg(ist), v. 6, 12-60; 1885-1930.
- Nat(ional) Drug Clerk, v. 1-18; 1913-1930.
- New Engl(and) Drugg(ist), v. 5-15; 1893-1903.
- New Idea, v. 1-11, 22-37; 1883-1899.
- New Rem(edies), v. 1-12; 1872-1883.
- N(orth)w(estern) Drugg(ist), v. 1-19, 27-38; 1899-1930.
- Pac(ific) Drug Rev(iew), v. 2-8, 16-21; 1890-1909.
- Pac(ific) Pharm(acist), v. 1-13; 1907-1919.
- Pharm(aceutical) Era, v. 1-67; 1887-1930.
- Pharm(aceutical) Jour(nal), v. 1-15; 1881-1893.
- Pharm(aceutical) Rec(ord), v. 1-15; 1881-1893.
- Pharm(aceutical) Rev(iew), Balt., v. 1-2; 1892-1893.
- Pharm(acist), v. 1-2; 1868-1869.
- Pharm(acist's) & Chem(ist's) Rec(ord), v. 3-18; 1870-1885.
- Prac(tical) Drugg(ist), v. 1-49; 1897-1931.
- Proc(eedings of the) Am(ericana) Pharm(aceutical) Assoc(iation),  
v. 1-59; 1851-1911.
- Sou(thern) Pharm(aceutical) Jour(nal), v. 1-23; 1908-1931.
- Spatula, v. 1-22; 1894-1916.
- West(ern) Drugg(ist), v. 7-50; 1885-1928.
- Y(ea)rbook (of the) Am(ericana) Pharm(aceutical) Assoc(iation),  
v. 1-12; 1912-1923.
- Y(ea)rbook (of the) Brit(ish) Pharm(aceutical) Conf(erence),  
1867-1930.

LIST OF BOOKS CONSULTED

- Aiton, W., Hort. Kew., 1 ed. 1789.
- Bigelow, J., Treatise on the Materia Medica, 1 ed., 1822.
- Brown, P. O., The complete Herbalist, 1 ed., 1870.
- Committee, Pharmacopoeia of the American Institute of Homeopathy, 1 ed., 1897.
- Coxe, J. R., Am(eric)an Dispens(atory), 1 ed., 1806; 4 ed., 1818; 6 ed., 1825; 7 ed., 1827; 8 ed., 1830; 9 ed., 1831.
- De Candolle, A. P., Prodronius, v. 15, 1862.
- Endlicher, S., Genera Plantarum, 1836.
- Greenish, H. G., Text Book on Materia Medica, 1 ed., 1929.
- Hawks, E., Pioneers of Plant Study, 1928.
- King, J., Am(eric)an Dispens(atory); 6 ed., 1864; 8 ed., 1872; 10 ed., 1875; 15 ed., 1881; 16 ed., 1889; 18 ed., 1900.
- King, J. & Newton, R. S., Eclec(tic) Dispens(atory), 1 ed., 1852.
- Kraemer, H., A Text Book of Botany & Pharmacognosy, 1 ed., 1902.
- Kraemer, H., Scientific and Applied Pharmacognosy, 1 ed., 1915.
- Lewis, W., Experimental History of Materia Medica, 1 ed., 1761.
- Linne, C. A., Materia Medica, 2 ed., 1772.
- Lloyd, J. U., Origin and History of all the Pharmacopoeial Vegetable Drugs, Chemicals and Preparations, 1921.
- Merrill, A., Digest of Materia Medica and Pharmacy, 1883.
- Murray, J., System of Materia Medica and Pharmacy, 1 ed., 1815.
- Persoon, C. H., Syn. Plant., 1807.
- Rusby, H. H., Bliss, R. A. Jr., Ballard, C. W., The Properties and uses of Drugs, 1 ed., 1930.
- Stille, A., & Maisch, J. M., Nat(ional) Dispens(atory), 1 ed., 1879; 2 ed., 1879; 3 ed., 1884; 5 ed., 1894.

Surg. Gen. Lib. Index, Series 1, 2, 3.

Thatcher, J., New Am(eric)an Dispens(atory), 1 ed., 1810; 2 ed., 1813; 4 ed., 1821.

Tschirch, A., Haubuch du Pharmakognosie, 1 ed., 1912.

Winkler, E., Real-Lexikon, 1842.

Wood, G. B. & Bache, F. U(nited) S(tates) Dispens(atory),  
2 ed., 1834; 3 ed., 1836; 4 ed., 1839; 5 ed., 1843; 6 ed.,  
1845; 7 ed., 1847; 8 ed., 1849; 9 ed., 1851; 10 ed., 1854;  
11 ed., 1858; 12 ed., 1869; 13 ed., 1870; 14 ed., 1879;  
15 ed., 1883; 16 ed., 1892; 17 ed., 1894; 18 ed., 1899;  
19 ed., 1907; 20 ed., 1918; 21 ed., 1926.

Youngken, H. W., Text Book of Pharmacognosy, 1 ed., 1926.

UNITED STATES PHARMACOPOEIA ( O-X )

(1820-1920)

and

NATIONAL FORMULARY ( I-V )

(1888-1926)

HISTORY

of

ELASTICA

and

ITS OFFICIAL PREPARATIONS

U.S.P.-1890,-p. 106

Elastica

India-Rubber

(Caoutchouc)

The prepared milk-juice of various species of Hevea (Nat. ord./ Euphorbiaceae), known in commerce as Para Rubber./

In cakes, balls, or hollow, bottle-shaped pieces, externally brown to brownish-/black, internally brownish or of lighter tint; very elastic; insoluble in water,/ diluted acids, or diluted solutions of alkalies; soluble in chloroform, carbon/ disulphide, oil of turpentine, benzin, acid benzol. When heated to about 125 degrees C./ (257 degrees F.) it melts, remaining soft and adhesive after cooling. Odor faint, pecu-/liar; nearly tasteless.

When pure or nearly pure India-rubber floats on water.

---

U.S.P.-1900,-p. 122

Elastica

Rubber

The prepared milk-juice of several species of Hevea Aublet (Fam./ Euphorbiaceae, known in commerce as Para Rubber./

In flask-shaped or roundish masses, or in pieces of the same having sharply/ incised surfaces and exhibiting a laminated structure; floating on water; ex-/ternally brownish to brownish-black; internally of a lighter tint, mottled; odor/ creosote-like; nearly tasteless./

Pure Para Rubber is insoluble in water, dilute acids, or dilute solutions of/ the alkalies; soluble in chloroform, carbon disulphide, oil of turpentine, petro-/leum benzin, and benzene; when heated to about 125 degrees C. (257 degrees F.) it melts,/ remaining soft and adhesive after cooling./

SUMMARY OF U.S.P. & N.F. DATA OF ELASTICA

Official in: U.S.P., 1890, 1900.

Official Latin Title:

Elastica, U.S.P., 1890, 1900.

Official English Title:

India-Rubber, U.S.P., 1890.  
Rubber, U.S.P., 1900.

Official Abbreviation:

-----

Official Synonym:

(Caoutchouc) U.S.P., 1890.

Official Family:

Nat. Ord., Euphorbiaceae, U.S.P., 1890.  
Euphorbiaceae, U.S.P., 1900.

Scientific Name:

Various species of Hevea, U.S.P., 1890.  
Several species of Hevea, U.S.P., 1900.

Part Used:

The prepared milk-juice, U.S.P., 1890, 1900.

Description:

U.S.P., 1890, 1900.

Official Preparations:

Emplastrum Adhaesivum, U.S.P., 1900, 1920  
Emplastrum Elasticum, U.S.P., 1910.

Dose:

-----

Assay:

-----

U.S.P.-1900,-p. 124

Emplastium Adhaesivum

Adhesive Plaster

Rubber, cut in small pieces, twenty grammes	20 Gm.
Petrolatum, twenty grammes	20 Gm.
Lead plaster, nine hundred and sixty grammes---	<u>960 Gm.</u>
To make one thousand grammes--	1000 Gm.

Melt the rubber at a temperature not exceeding 150 degrees c. (302 degrees F.);/ add the petrolatum, and continue the heat until the rubber is dis-/solved. Add the Lead Plaster to the hot mixture; continue the heat/ until it becomes liquid, then strain, allow it to cool, and stir until it/ stiffens.

---

U.S.P.-1910,-p. 124

Emplastium Elasticum

Rubber Plaster

Emp. Elast.

Rubber Adhesive Plaster

A mixture of rubber, resens and waxes, with a filler of an absorbent/ powder, such as orris root or starch, mechanically mixed and spread/ upon cotton cloth or other fabric.

---

U.S.P.-1920,-p. 128

Emplastrum Adhaesivum

Adhesive Plaster

Emp. Adhaes.

Emplastrum Elasticum U.S.P. IX; Rubber Adhesive Plaster

A mixture of rubber, resins, and waxes, with a filler of an absorbent/ powder, such as zinc oxide, orris root or starch, mechanically mixed/ and spread upon cloth.

The plaster mass should contain about 30 per cent of pure rubber. When/ zinc oxide is used, it should represent at least 20 per cent of the plaster mass./

The mass must be free from nodules and spread evenly on a cotton fabric/ backing having not less than 62 threads to each square cm., each piece of 100/ square cm. weighing not less than 1.18 Gm./

One hundred square cm. of the plaster should contain not less than 1.50/ Gm. of plaster mass./

A strip of the plaster 5cm. by 6.5 cm., applied to a hard wood surface for/ thirty minutes at a constant temperature of 37 degrees C. should resist a tension of/ not less than 40 pounds when applied by a tensile strength machine or other/ suitable devise, the pull being exerted parallel with the warp and with the/ longer dimension of the plaster./

SUMMARY OF U.S.P. & N.F. DATA OF EMPLASTRUM ADHAESIVUM

Official in: U.S.P., 1900.

Official Latin Title:

Emplastrum Adhaesivum, U.S.P., 1900.

Official English Title:

Adhesive Plaster, U.S.P., 1900.

Official Abbreviation:

-----

Official Synonym:

-----

Official Family:

-----

Scientific Name:

-----

Part Used:

-----

Description:

-----

Official Preparations:

-----

Dose:

-----

Assay:

-----

SUMMARY OF U.S.P. & N.F. DATA OF EMPLASTRA

Official in: U.S.P., 1910, 1920.

Official Latin Title:

Emplastrum Elasticum, U.S.P., 1910.  
Emplastrum Adhaesivum, U.S.P., 1920.

Official English Title:

Rubber Plaster, U.S.P., 1910.  
Adhesive Plaster, U.S.P., 1920.

Official Abbreviation:

Emp. Elast., U.S.P., 1910.  
Emp. Adhaes., U.S.P., 1920.

Official Synonym:

Rubber Adhesive Plaster, U.S.P., 1910.  
Emplastrum Elasticum, U.S.P. IX; Rubber Adhesive  
Plaster, U.S.P., 1920.

Official Family:

-----

Scientific Name:

-----

Part Used:

-----

Description:

-----

Official Preparations:

-----

Dose:

-----

Assay:

-----

APPROVED BY W. O. Richtmann

Assoc. Prof. of Pharmacognosy