

Abstracts of American Patents Relating to Chemistry.

(From the U. S. Patent Office Gazette.)

Issued March 1, 1892.

469,704.—Method of manufacturing lithographic plates. Oskar Kindermann, Leipsic, Germany.

Zinc sheets are treated with a mixture of zinc chloride, stannic chloride, nitric acid, hydrochloric acid and water.

469,718.—Apparatus for the preparation of wort. Carl Roch, Chicago, Ill.

469,749.—Furnace for burning granular fuel. Charles R. Penfield, Duluth, Minn.

469,752.—Flour bolt. Charles A. Smith, Jackson, and Myron W. Clark, Parma, Mich.

469,764.—Dessicating closet. James A. Wills, Philadelphia, Pa.

469,770.—Apparatus for purifying water. Francis A. Bunnell, Syracuse, N. Y.

469,777.—Production and manufacture of pure asphaltum from natural asphalt. Henry A. Diehl, San Francisco, Cal.

In this process the asphalt is melted in a closed retort and the mineral impurities separated by sedimentation.

469,788.—Apparatus for removing vegetable matter from wool. Ludwig Kern, Hamburg, Germany.

469,811.—Apparatus for vaporizing oil. Joseph A. Aldridge, Indianapolis, Ind.

469,820.—Regenerative hot blast stove. George W. McClure and Carl Amsler, Pittsburg, Pa.

469,822.—Apparatus for cleaning wool or other material by use of steam or other fluid.

469,826.—Hot blast stove. George W. McClure, Pittsburg, Pa.

469,847.—Process of purifying illuminating gas. Julius Wiesender, San Francisco, Cal.

469,851.—Malting apparatus. August Deininger, Berlin, Germany.

469,857.—Method of and apparatus for heating with fluid fuel. William A. Koneman, Chicago, Ill.

468,858.—Process of manufacturing fuel gas. William A. Koneman, Chicago, Ill.

469,859.—Method of burning coal slack. William A. Koneman, Chicago, Ill.

469,860.—Apparatus for utilizing waste heat. William A. Koneman, Chicago, Ill.

- 469,866.—Coke oven.
 469,867.—Apparatus for quenching coke. } Thomas R. Osbourn,
 469,868.—“ “ “ “ “ “ } Philadelphia, Pa.
- 469,925.—Process of galvanizing metal tubes or bars. Thomas L. Thomas and Joseph B. Hillman, Prince's End, Eng.
- 469,945.—Absorber for ammonia refrigerating and ice making apparatus. Nils Johnson, St. Louis, Mo.
- 469,954.—Sizing compound. Alois Steinhauser, Fall River, Mass.
- 469,960.—Mercury column for ascertaining pressures. Almon B. Calkins, New York, N. Y.
- 469,999.—Ice machine. Florence W. Hoos and Emil Mann, Philadelphia, Pa.
- 470,004.—Filtering faucet. Henry H. Luse, San Francisco, Cal.
- 470,007.—Method of producing gas. Anthon W. Putman-Cramer, Brooklyn, N. Y.
- 470,012.—Method of producing photo-mechanical printing plates. Ludwig Schaefer, Heilbraun, Ger.
- 470,040.—Apparatus for the manufacture of gas. Jesse A. Dubbs, Allegheny, Pa.
- 470,060.—Vacuum evaporating pan. Samuel L. Lillie, Philadelphia, Pa.
- 470,077.—Grain scouring, polishing and separating machine. George E. Russel, Memphis, Tenn.
- 470,115.—Apparatus for coating paper or other fabrics. George I. Feldon, Lambeth, Eng.
- 470,121.—Apparatus for ageing whisky. John H. Haligan, Huntsville, Tex.
- 470,138.—Hydrocarbon oil vaporizer and burner. George Botsford, New Haven, Conn.
- 470,140.—Method of treating cereals and products. Emory V. Donelson, Baltimore, Md.
- 470,159.—Method and apparatus for reducing natural or artificial bituminous rock. Henry J. Warren, Buffalo, N. Y.

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- 470,171.—Smoke, consuming or preventing furnace. Judson A. Baldwin, Benton Harbor, Mich.
- 470,181.—Purification of brine. Caleb G. Collins, Kearney, N. J.
- An electric current forming an electromotive force, not exceeding two and one-half volts, is used in this method for the production of ozone.
- 470,209.—Process of amalgamating gold or silver with mercury. Butler G. Noble, Brooklyn, N. Y.
- 470,260.—Electric Battery. Vincenzo Riatti, Milan, Italy.

470,277.—Mode of hardening steel articles. William H. Wright, Buffalo, N. Y.

470,333.—Process of manufacturing artificial stones. Charles Genze, Berlin, Ger.

Powdered silicic acid is mixed with lime, and to the resulting product, stone material is added and then cast in molds, dried, subjected to high pressure in a steam boiler and finally treated with a bath of calcium chloride.

470,355.—Filter. John Sutton, Islip, N. Y.

470,361.—Process of washing yeast. Adolph Kliemetschek, New York, N. Y.

470,384.—Process of treating copper matte. Pierre Mauhes, Lyons, France.

470,420.—Furnace for burning liquid fuel. Stephen Cox, Jr., Bridgeton, N. J.

470,424.—Device for moistening in. E. M. Kraze., Orange, N. J.; F. Thurman, Chicago, Ill.

470,425.—Ozone machine. Frederick M. Gunnbacher, New York, N. Y.

470,447.—Method for the purification of alcoholic liquids. Paul C. Rosseau and Marie J. de Chantirac, Paris, and Marie J. D. A. De Lu Baume, Tourtom, France.

Alcoholic liquids are treated with a basic tartrate, and subsequently with a hyposulphite.

470,451.—Manufacture of compounds of pyroxyline. August Seher, Newark, N. J.

470,455. } Magnetic ore separator. Charles T. Thompson and Richard

470,456. } H. Sanders, Philadelphia, Pa.

470,476.—Evaporating apparatus. Thomas Craney, Bay City, Mich.

470,481.—Blast furnace and means for operating the same. John Gill, Edinburgh, Scot.

470,501.—Smoke consuming furnace. Bernhard Müller, Chemnitz, Ger.

470,506.—Coke oven. Johannes Reiter, Aix-la-Chapelle, Ger.

470,511.—Discharge trough for smelting furnaces. Adam J. Schumacher, Butte City, Mont.

470,548.—Evaporating pan. Jay B. Copeland, Punta Gorda, Honduras.

470,580.—Pneumatic malting apparatus. Friedrich Knütel, Charlottenburg, Germany.

470,587.—Ore washer. Samuel C. McLanahan and William F. Kirk, Hollidaysburg, Pa.

470,606.—Process of treating iron. Richard Southerton, Birmingham, Eng.

Briquettes or balls of emery, ammonia, alum and lime, are mixed with the ore and the iron reduced to its metallic state in a furnace.

470,620.—Filter. William Hilton, Reynoldsville, Pa.

470,621.—Treatment of beer. Leopold Hoff, Hamburg, Ger.

The beer is distilled and the condensed water condensed back into the boiling liquid. It is then cooled, filtered, treated with carbonic acid gas and, finally, aromatic substances are added to give the special character of the beer.

470,629.—Apparatus for making illuminating gas. Thomas H. Paul, Frostburg, Md.

470,635.—Apparatus for making sodium bicarbonate. George Bell, Sandown Lane, Wavertree, Eng.

470,640.—Process of reducing iron ore. Edward E. Graff, Pittsburg, Pa.

470,644.—Converter for copper ores. Pierre Mauhes, Lyons, France.

Issued March 15, 1892.

470,693.—Apparatus for moistening air. Emil Mertz, Basle, Switzerland.

470,711.—Hydrocarbon-burner. Carl Siemens, St. Petersburg, Russia.

470,712.—Metallurgical furnace. Carl Siemens, St. Petersburg, Russia.

470,713.—Method of working open hearth furnaces. Carl Siemens, St. Petersburg, Russia.

470,714.—Solution of lactic acid in oils and fats. Adolph Sommer, Berkeley, Cal.

470,715.—Process of dissolving lactic acid in oils and fats. Adolph Sommer, Berkeley, Cal.

The process consists in digesting conc. lactic acid with the oil or fat in the presence of a dehydrating agent.

470,781.—Ore concentrator. Gustavus L. Cudner, New York, N. Y.

470,792.—Galvanic battery. Francis H. Root, Chicago, Ill.

470,823.—Apparatus for cooling hot liquid sugars. Henry Heide, New York, N. Y.

470,902.—Method of and apparatus for producing clear wort. Gustav Sobotka and Adolph Ktemetschek, New York, N. Y.

470,911.—Desulphurizing oil. Jesse A. Dubbs, Allegheny, Pa.

470,920.—Process of making oxymethoxybenzoic acid. Bueno R. Seifert, Radebeul, Germany.

An aqueous solution of guaiacol or eugenol is made with an alkali, the water is then evaporated, and the residual dry salt is treated with CO_2 under pressure and heated at a temperature of over 100°C .

470,921.—Apparatus for separating precious metals by amalgamation from ores or materials containing them. Richard E. Schull, London, Eng.

470,922.—Manufacture of filaments for incandescent lamps. Thomas A. Edison, Menlo Park, N. J.

Sheets of paper are heated with hydrofluoric acid and filaments cut from the cemented sheets.

470,925.—Manufacture of filaments for incandescent electric lamps. Thomas A. Edison, Llewellyn Park, N. J.

A number of fibres are united into one by means of a carbonizable cement and the filament then carbonized.

470,929.—Magnetic separator. Thomas A. Edison, Llewellyn Park, N. J.

470,966.—Disinfecting apparatus. Frederick André, Hildesheim, Ger.

470,974.—Process of purifying water gas. Henry S. Blackmore, Mount Vernon, N. Y.

The gas is passed over and through caustic alkali in a fused state to remove carbonic oxide.

471,033.—Coke-oven. Richard de Soidenhoff, Cardiff, Eng.

471,060.—Method of treating cane juice and other saccharine liquors. Henry E. Niese, Jersey City, N. J.

471,065.—Apparatus for galvanizing sheet metal. Moses Baylies, London, Eng.

471,081.—Plastering Composition. Walter Robinson, Onondaga, N. Y.

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471,103.—Ore triturating and amalgamating apparatus. Gustavus L. Cudner, New York, N. Y.

471,147.—Manufacture of pigments. George W. Scollay, New York, N. Y.

Method for oxide of iron pigments.

471,163.—Material for the treatment of walls. George H. Wooster, New York, N. Y.

The composition consists of plaster of paris, alum, a fibrous material and ground marble.

471,174.—Process of concentrating ores. Charles B. Hebron and Carrie J. Everson, Denver, Col.

471,182.—Thermostatic regulator. Edwin C. Merrill, Allegheny, Pa.

471,186. } Art of producing colored photographs, James W. McDonough,

471,187. } Chicago, Ill.

471,191.—Combination crayon. William Q. Prewitt, Lexington, Ky.

471,229.—Evaporating pan. Lorin R. Tabor, Westford, Vt.

471,236.—Liquid substitute for eggs. John E. Furber, Lawrence, Mass.

A liquid compound consisting of an emulsion made of soluble albumen, water, animal or vegetable oil, sodium chloride, and sodium bicarbonate with a suitable coloring matter, combined with a second liquid similar to the above but without the coloring matter.

471,258.—Ore concentrator. James M. Thompson, San Francisco, Cal.

471,261.—Apparatus for purifying, sterilizing and filtering drinking water. Simeon L. West, Washington, D. C.

- 471,264.**—Ore roasting furnace. Horace F. Brown, Butte City, Mont.
- 471,268.**—Ore conveyor and method of arranging ore thereon. Thomas A. Edison, Llewellyn Park, N. J.
- 471,275.**—Gas burner for furnaces. James S. Rogers, Saratoga Springs, N. Y.
- 471,284.**—Machine for removing oil from tin plate. David Walters and Isaac L. Morris, Cleveland, Ohio.
- 471,287.**—Method of and apparatus for making wall paper. George K. Birge, Buffalo, N. Y.
- 471,288.**—Apparatus for marbleizing glass, paper and the like. Abraham Butterfield, Trenton, N. J.
- 471,291.**—Apparatus for destructive distillation of mineral oils. John Laing, Edinburgh, Scotland.
- 471,294.**—Method of and apparatus for purifying and regulating the temperature of air. Gustav Sobotka and Adolph Kliemetschek, New York, N. Y.
- 471,299.**—Annealing furnace. Olof J. Winlund and August L. Larson, Worcester, Mass.
- 471,306.**—Process of making nitrogenous fertilizers. Joseph Van Ruymbeke, Chicago, Ill.
- 471,309.**—Process of fermenting. Carl Funk, Charlottenburg, Ger.
- 471,314.** } Temperature regulator. James F. McElroy, Albany, N. Y.
- 471,315.** }
- 471,318.**—Apparatus for separating and purifying middlings. Alphons Steiger, London, Eng.
- 471,319.**—Concentrator. James Tulloch, Angel's Camp, Cal.
- 471,322.**—Clay separator. Charles A. Wyman, Hutchinson, Minn.
- 471,323.**—Process of separating oily inks from gauze. Jesus Castaneda, Mexico, Mexico.
- 471,335.**—Process and apparatus for manufacturing pure yeast. Gaston Guignard, Paris.
- A sweet wort is sterilized and then inoculated with pure yeast. During the fermentation sterilized air is blown in by which the production of is yeast increased. The yeast is then separated from the wort and incorporated with a gelatinized or gelyosed wort. The operations are conducted out of contact with unsterilized air.
- 471,343.**—Artificial antiseptic sponge. Alexander Poehl, St. Petersburg, Russia.
- 471,361.**—Gas generator and burner. James S. Rogers, Saratoga Springs, N. Y.
- 471,367.**—Amalgamator for fire-milling gold ore. Alfred Woodhouse, Bregaster, Woking, Eng.
- 471,385.**—Filter. John M. Holt, Manchester, Va.

471,398.—Apparatus for the manufacture of gas. James S. Rogers and James H. Baker, Saratoga Spring, N. Y.

471,422.—Pyroxyline varnish. Julia Hale, Crawford, N. J.

A thin solution of pyroxyline in a menstruum of amyl acetate, naphtha, and a "light solvent."

471,423.—Process of chloridizing gold ores. Maximilian J. Hartung, Sydney, New South Wales.

The process consists in roasting the ores "and subjecting them to the action of plumbates of the alkaline earth, metals and hydrochloric acid, whereby chlorine is set free to combine with the contained metal."

471,437.—Apparatus for coating metal plates with tin. Philip Rogers, Swansea, and John Player, Clydach, Eng.

471,438.—Composition of matter for pencils or crayons. Gustav Schwurzwald, New York, N. Y.

The comp. comprises paraffine wax, dammar gum, naphthol, bronze powder, potassium bichromate, and pulv. mica.

471,454.—Process of and apparatus for bleaching by electrolysis. Albert E. Woolf, New York, N. Y.

471,496.—Filter. Frederic C. Weir and Henry B. Furniss, Cincinnati, Ohio.

471,505.—Apparatus for vaporizing and burning hydrocarbon oils. Rudolph Cornader, Erie, Pa.

471,520.—Process of making piperazin, Wilhelm Majest, Berlin, Ger.

The process "consists in isolating the piperazin in a compound thereof by means of an alkaline solution, distilling the piperazin into a suitable acid to form salts and crystallizing out the salts."

471,521.—Feed water heating and purifying apparatus. Daniel W. McCallum, Fort Worth, Tex.

471,523.—Temperature regulator. James F. McElroy, Albany, N. Y.

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471,538.—Storage battery plate and process of making the same. William W. Donaldson and Roderick Macrae, Baltimore, Md.

471,550.—Process of purifying hyposulphite leaching solutions. Edward R. Holden, Denver, Colo.

Sodium bisulphite is added to the solution after the latter has served as a leach.

471,596.—Vapor burner. Clearmont V. Best, Canton, Ohio.

471,602.—Disinfecting device. Nelson M. Dyer, Toledo, Ohio.

471,603.—Disinfecting apparatus. Nelson M. Dyer, Toledo, Ohio.

471,611.—Process of producing adhesive fabrics. Bernard Hockman, Long Island City, N. Y.

471,613.—Adjusting device for marking machines. Charles Kaestner, Chicago, Ill.

471,614.—Centrifugal starch refining and separating machine. George A. Kerr, Columbus, Ind.

471,616. } Process and apparatus for treating refractory ores. Julius
471,617. } Leede, Minneapolis, Minn.

471,618.—Apparatus for desulphurizing ores. Julius Leede, Minneapolis, Minn.

471,638.—Process of making rosaniline dyes. Benno Homolka, Höchst-on-the-Main, Ger.

The process consists in treating diamido-diphenylmethan bodies with oxidizing agents in presence of hydrochlorates of aromatic amines.

471,659.—Process making of diamido-diphenylmethan bases. Eduard Vongerichten, Höchst-on-the-Main, Ger.

471,668.—Process of manufacturing soap. William A. Grant, Houston Texas.

471,671.—Process of and apparatus for making gas. Julius Leede Minneapolis, Minn.

471,672.—Apparatus for treating refractory ores. Julius Leede, Minneapolis, Minn.

671,684.—Ice making machine. Daniel L. Holden, New York.

471,688. } Process and apparatus for separating and assorting yeast.

471,689. } Gustav Sobotka, New York, N. Y.

471,692.—Coking oven. Herman Ekelund, Jöuköping, Sweden.

471,707.—Apparatus for maturing spirits or other liquor. James McKinless, Manchester, Eng.

471,721.—Hydrocarbon burner. Henry T. Russell, Chicago, Ill.

471,731.—Machine for separating gold, silver, etc. James B. Freeman, Los Angeles, Cal.

471,757.—Smoke consumer. Edson J. Hadlock, Big Spring, Tex.

471,778.—Carbureting apparatus. Lucius J. Phelps, Passaic, N. J.

471,780.—Method of making white lead. Elwyn Waller and Charles A. Sniffin, New York, N. Y.

471,811.—Filter. William M. Deutsch, Elizabeth, N. J.

471,840.—Filter. Luther N. Blessing, Baltimore, Md.

471,844.—Process of and composition for manufacturing sand bricks. Eugene H. Lewis, St. Joseph, Mich.

471,879.—Beverage. William M. Myers, Hannibal, Mo.

The beverage consists of $\frac{1}{3}$ lb. of hops boiled in water and filtered, one pint of starch about the consistency of milk, which is added to this thin filtrate, $\frac{1}{2}$ gal. of old cane molasses, $1\frac{1}{2}$ fluid oz. ext. of sarsaparilla, and sixteen-teaspoonfuls of citrate of magnesia, 1 oz. of turmeric, and sufficient water to make up a mixture of eight gallons, then adding one pint of baker's yeast and a quantity of raisins.

471,945.—Galvanic battery. William Burnley, North East, Pa.

471,963.—Process of refining oils. Thomas Drake, Hnddersfield, Eng.

The hydrocarbon oils are first concentrated, and then chlorine gas is forced through the oil until its sp. gr. has increased to between .900° and 1.05°, and finally correcting the acidity of the process.

471,995.—Diffusion apparatus. Edward Gschwind, New Orleans, La.

J. F. G.