

## Abstracts of American Patents Relating to Chemistry.

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

Issued May 5, 1892.

**473,928.**—Process of dyeing black. Meinhard Hoffmann, Mainken, near Frankfort-on-the-Main, Ger.

The material is first dyed with the coloring matter named “naphthaline violet” and then treated with nitrous acid, and finally passed through a solution of phenol or an amine.

**473,957.**—Coal washing and separating machine. James Pollock, Wilkesbarre, Pa.

**474,005.**—Rotary drying machine. Richard E. Fischer, Baltimore, Md.

**474,014.**—Gold concentrator. William H. Hill, Atlanta, Ga.

**474,019.**—Apparatus for wasting and smelting. Robert H. Lanyon, Nevada, Mo., and William Lanyon, Pittsburg, Kan.

**474,022.**—Process of separating and cleaning coal and other minerals. Carl Lührig, Dresden, Ger.

**474,023.**—Apparatus for washing, separating and concentrating ores of different specific gravity. Carl Lührig, Dresden, Ger.

**474,034.**—Air compressor. Benjamin F. Teal, Chicago, Ill.

**474,035.**—Atomizer. Victor C. Vant Wond, Brooklyn, N. Y.

**474,036.**—Funnel. Alhana P. Wood, Atlanta, Ga.

**474,044.**—Machine for filling and corking bottles. Henry Heartfield, Croydon, Eng.

**474,052.**—Fiber preparing machine. John L. Acosta, Vera Cruz, Mexico.

**474,063.**—Atmospheric gas burner. Charles M. Lungen, Brooklyn, N. Y.

**474,087.**—Machine for drving textile fiber. William Hartley, Jr., Lonsdale, R. I.

**474,095.**—Ore pulverizer. William L. Morris, Cleveland, Ohio.

**474,099.**—Method of preparing figs. George W. Reamer, Forest Hill, Cal.

The figs are subject to the action of steam to soften and clean them and after expression of part of the juice reduced to any suitable form.

**474,119.**—Glass grinding machine. Robert Friedel, Stuttgart, Ger.

**474,135.**—Safety appliance for steam boilers. John Kastner, Jr., Evansville, Ind.

**474,160.**—Separator for purifying steam. David Cochrane, Philadelphia, Pa.

**474,178.**—Gas generating apparatus. William H. Morgans, Pontiac, Mich.

**474,201.**—Apparatus for making gas. Paul A. N. Winand, Philadelphia, Pa.

**474,202.**—Gas producer. Paul A. N. Winand, Philadelphia, Pa.

**474,241.**—Water or gas meter. John Goodman and Henry Goodman, Louisville, Ky.

**474,258.**—Composition of matter for spinning rings, etc. Rose A. Johnson, Manchester, and Robert Brewster, New Barnet, Eng.

The composition consists of fifty parts feldspar, fifty parts rock crystal, thirty parts china clay, and thirty parts of a flux, such as borax.

**474,267.**—Microscopic sediment filter. Porter W. Shimer, Easton, Pa.

**474,272.**—Ore concentrator. Crighton R. Townsend, Idaho Springs, Col.

**474,295.**—Anti-friction alloy. John Fowler, Louisville, Ky.

An alloy of antimony, copper and phosphor-tin is first prepared and then fused with block tin.

**474,305.**—Drier. James G. Sanderson, New York, N. Y.

**474,326.**—Siphon bottle filling machine. Frederic J. Johnson, Cambridge, and George E. Barton, Somerville, Mass.

**474,344.**—Apparatus for generating heat. Henry A. Ramsay, Baltimore, Md.

*Issued May 10, 1892.*

**474,354.**—Middlings purifier. Seth H. Baker and James H. Verity, Rapidan, Minn.

**474,389.**—Centrifugal machine. Hugh W. Lafferty, Wilmington, Del.

**474,412.**—Machine for forming fuel bricks. Johann P. Schmidt, Jersey City, N. J.

**474,413.**—Art of and apparatus for aerating liquids. Joseph Schneible, Brooklyn, and Carl A. Schneible, New York, N. Y.

**474,414.**—Apparatus for aerating liquids. Carl A. Schneible, New York, and Joseph Schneible, Brooklyn, N. Y.

**474,419.**—Process for making fertilizers. Thomas M. Smith, Baltimore, Md.

**474,434.**—Paint oil. George W. Bankers, Brooklyn, N. Y.

A paint oil composed of a solution of naphthaline in fish oil.

**474,443.**—Alloy. Ernest W. Cooke, Chicago, Ill.

An alloy of iron, aluminium and copper and containing at least 75% of iron.

**474,446.**—Apparatus for pickling meat. Johann Fey, Offenbach-on-the-Main, Ger.

**474,454.**—Exciting fluid for galvanic batteries. Carl Lützke, Jr., Berlin, Ger.

A concentrated solution of one or several of the chlorides of copper, iron, zinc, etc., in combination with two to three parts by weight of nitrate of mercury.

**474,481**—Gas regulator. Michael O'Gorman, Jersey City, N. J.

**474,490**.—Dust collector. George Walter, Duluth, Minn.

**474,491**.—Dust collector. George Walter, Thief River Falls, Minn.

**474,496**.—Apparatus for molding earthenware, etc. Joseph Crossley, Trenton, N. J.

**474,510**.—Bottle washing machine. Jacob F. Wittemann, Fort Hamilton, N. Y.

**474,513**.—Machine for combing fiber. David Barnett and David Black, Bradford, Eng.

**474,527**.—Sulphuric acid pan and process of making the same. Richard Kiiich, Hanau-on-the-Main, Germany.

Platinum is heated to a degree higher than the melting point of gold and then molten gold is poured upon the same, thus alloying the two surfaces and coating the platinum with a layer of gold.

**474,529**.—Manufacture of explosives. Frank Roller, West Berkeley, Cal. Nitrates or other gas producing compounds or materials are covered with a coating of colophony in an oil.

**474,531**.—Process of roasting coffee. Carl Salomon, Brunswick, Ger.

The coffee is first exposed directly to contact with gases heated to a high temperature until the empyrenumatic matters are driven off and the aromatic qualities developed as indicated by the alkaline reaction of the escaping gases. The wasted material is then quickly cooled.

**474,539**.—Process of and apparatus for making silicates and hydrochloric acid. Walter Walker, Eng.

Sand is mixed with chloride of sodium and lime and the mass subjected to sufficient heat in the presence of moisture to form a silicate of soda and lime and to drive off the hydrochloric acid.

**474,542**.—Thermostat. Archibald H. Brintnell, Toronto, Can.

**474,561**.—Apparatus for the manufacture of explosives. Hiram S. Maxim, London, Eng.

**474,567**.—Process of galvanizing or tinning wire cloth. Charles B. Rumsey, Homer, N. Y.

**474,573**.—Ore roasting furnace. Horace F. Brown, Butte City, Mont.

**474,581**.—Process of preserving meat. José Mariosa, San Paulo, Brazil.

The meat is coated with a mixture consisting of about forty parts bicarbonate of soda and sixty parts of sugar and sufficient water to form a pasty mass and subjected to an air current to thoroughly dry the coating applied.

**474,585**.—Art of cleaning and washing raw sugar.

**474,591**.—Process of extracting gold from sulphide ores. Thomas A. Edison, Llewellyn Park, N. J.

**474,592**.—Ore conveying apparatus. Thomas A. Edison, Llewellyn Park, N. J.

**474,630.**—Apparatus for cooling and aerating malt liquors. Henry E. Deckebach, Cincinnati, Ohio.

**474,631.**—Low water alarm. Thomas A. Delaney and Robert E. Hills, Chicago, Ill.

**474,636.**—Mechanism for testing and recording the properties of flour. James Hogarth, Kirkcaldy, Scotland.

**474,637.**—Machine for making vessels from fibrous pulp. Eber Hubbard, Chicago, Ill.

**474,685.**—Water purifier. Arthur Pennell, Kansas City, Mo.

**474,693.**—Paint. Charles H. Reaney, Washington, D. C.

A paint consisting of "zinc oxide, red lead, drop ivory-black, pulverized slate, raw linseed oil, spirits of turpentine, oxide drier, bisulphide of carbon and pure rubber."

**474,702.**—Composition for leather dressing. James E. Swain, Baltimore, Md.

**474,714.**—Fiber machine. Luis Bacallado y Sanchez, Matanzas, Cuba.

**474,716.**—Machine for creasing powder-papers. Alfred G. Beale and Thomas Nesbitt, Tmbridge Wells, Eng.

**474,778.**—Process of making nitro-cellulose. Hudson Maxim, New York, N. Y.

*Issued May 17, 1892.*

**474,807.**—Continuous Kiln. Max R. Boehmcke, Centinela, Cal.

**474,811.**—Baking powder. Charles A. Catlin, Providence, R. I.

A preparation composed of phosphoric acid in granular form and bicarbonate of soda.

**474,814.**—Process of preparing celluloid or similar materials for printing. Arthur A. C. de Coëtlogon, Paris, France.

**474,828.**—Medical battery. Philip Hathaway, New York, N. Y.

**474,829.**—Process of concentrating ores. Charles B. Hebron, Denver, Col.

**474,834.**—Non-conducting material. Henry W. Johns, New York, N. Y.

Composed of hair, asbestos, sponge and a disinfectant or insect destroying material.

**474,834.**—Carburetor. John W. Lambert, Ohio City, Ohio.

**474,850.**—Process of producing photographs on hard surfaces. Armand Müller Jacobs, New York, N. Y.

**474,864.**—Process of treating cottonseed oil. George W. Scollay, New York, N. Y.

Ochre is dried and then brought into intimate contact with the oil and finally separated from the refined oil. The ochre separating and carrying the impurities.

**474,865.**—Composition for use as ornamental moldings, etc. Oscar von Slauna, Jersey City, N. J.

A plastic composition containing dextrine, sulphate of lime, silicate of soda, and vegetable fibers.

**474,880.**—Centrifugal machine for emulsifying liquids. George W. Towar, Jr., Detroit, Mich.

**474,922.**—Brick kiln. Stephen J. Plant, Momence, Ill.

**474,933.**—Furnace for the incineration of garbage. John Wilson, New York, N. Y.

**474,942.**—Manufacture of yeast. Jacob Blumer, Brooklyn, and Charles Schlagenhauser, New York, N. Y.

**474,943.**—Method of making yeast. Jacob Blumer, Brooklyn, and Charles Schlagenhauser, New York, N. Y.

**474,944.**—Process of making paper pulp. Norman H. Brokaw, Kankana, Wis.

Sticks of wood are steamed or steeped to remove the resin and then cut into disks or chips and submitted to the action of sulphite liquor.

**474,957.**—Rheostat. Albert B. Herrick, Bayonne, N. J.

**474,961.**—Apparatus for heating and circulating water. Henry A. Jones and Joseph E. Marcy, New York, N. Y.

**474,965.**—Bottle filling machine. Willoughby M. McCormick, Baltimore, Md.

**475,025.**—Purifying and manufacturing saccharine solutions. Moriz Weirich, St. Louis, Mo.

**475,050.**—Chemical fire extinguisher. Russell A. Ballou, Boston, Mass.

**475,060.**—Revolving waster. Rudolph Ködler. Lipine, Germany.

**475,062.**—Carbon product. Louis S. Langville, Troy, N. Y.

A product made "from the wood-cellulose and resinoid residuum of wood pulp manufacture, and in which the bulk of the silica of the wood-cellulose has been removed and the lighter carbon produced from the resinoid combined with the denser carbon of the wood-cellulose."

**475,063.**—Pulp beating and refining machine. Edward R. Marshall, Turner's Falls, Mass.

**475,065.**—Dyeing apparatus. Andrew Reid, Amsterdam, N. Y.

**475,070.**—Melting furnace. Clarence L. Wheeler, Marion, Ind.

**475,122.**—Apparatus for sterilizing milk. Franz Krämer, New York, N. Y.

**475,225.**—Centrifugal machine. Robert D. Weaver, Washington, D. C.

**475,229.**—Art of dyeing wool. James A. Young, Boston, Mass.

**475,255.**—Rheostat. Walter A. Sterling, Denver, Col.

**475,260.**—Method of and apparatus for deoxidizing metals. Montgomery Waddell and Justus B. Entz, New York, and William A. Phillips, Brooklyn, N. Y.

**475,267.**—Brick kiln. Anton Dimpf, Munich, Ger.

475,284.—Crushing mill. Charles E. Philes, Stockton, Cal.

*Issued May 24, 1892.*

475,330.—Stone crusher. George Lowry, Northampton, Eng.

475,335.—Manufacture of electrodes for secondary batteries. James F. McLaughlin, Philadelphia, Pa.

475,347.—Ore crusher. Frank A. Ross, Chicago, Ill.

475,351.—Metallurgical furnace. Carl Siemens, St. Petersburg, Russia.

475,355.—Welding compound. Hooper B. Straut, Lincoln, Neb.

A composition compounded of borax, one pound; tripoli, one pound; muriate of ammonia, four ounces; prussiate of potash, one ounce; soda ash, five ounces; white sand, five ounces; soft water, one quart.

475,360.—Amalgamator. James M. Thompson, San Francisco, Cal.

475,372.—Process of developing photographic pictures. Mommie Andréßen, Berlin, Ger.

475,381.—Carbureted-hydrogen-gas generator and burner. John W. Blake and Joseph G. Sackett, Kansas City, Mo.

475,382.—Composition of matter and method of producing the same. Craft C. Carroll, New York, N. Y.

An alloy of silver, tin, copper and aluminium.

475,395.—Process of recovering grease, etc., from wool washings. Roger B. Griffin, Auburndale, Mass.

475,398.—Furnace for iron working. William Heckert, William J. Thomas and Frank L. Heckert, Findlay, Ohio.

475,402.—Process of obtaining metallic zinc from zinc sulphite by electrolysis. Theodor Lange, Brieg, Ger.

475,413.—Compound for cleaning and scouring. Chas. H. Peterson and Orlando C. Ruge, St. Louis, Mo.

A compound containing "water, aqua ammonia, alcohol, sulphuric her, glycerine, cocconut oil soap and quillaia bark."

475,433.—Brick kiln. Max A. T. Boehncke, Centinela, Cal.

475,437.—Extracting perfumes. Robert A. Chesebrough, New York, N. Y.

475,454.—Coated metal pipe and method of manufacturing the same. William Lacy, Jr., Los Angeles, Cal.

475,471.—Pulverizing machine. Axel Sahlin, New Brighton, N. Y.

475,478.—Hydro-carbon oil burner for furnaces. John Wilson, New York, N. Y.

475,483.—Clay reducer. Walfrid Burkman, San Francisco, Cal.

475,498.—Process for rendering iron, steel and other similar metals homogeneous. Joseph C. Fraley, Philadelphia, Pa.

475,518.—Temperature regulator. James F. McElroy, Albany, N. Y.

475,522.—Apparatus for separating matter from slag. Dennis Sheedy, Denver, Col.

- 475,528. } Rheostat. Charles Willms, Baltimore, Md.  
 475,529. }
- 475,540.—Apparatus for discharging gas-retorts. André Coze, Paris, France.
- 475,547.—Deodorizing device. Edward O. Ely, Boston, Mass.
- 475,548.—Beer cooler. William W. Ferguson, Bloomdale, Ohio.
- 475,551.—Process of un gumming and decorticating textile material. Charles Girard, Paris, France.
- The fibers are first treated with potassium manganate, then washed and treated to a bath of sulphurous acid and again washed.
- 475,557.—Ore sampling device. Robert C. Hawley, Pueblo, Col.
- 475,558.—Process of treating matter and ores. Henri L. Herrenschnidt, Petit Querilly, France.
- 475,574.—Apparatus for manufacturing salt. Charles F. Lawton, Arthur W. Lawton and Albert L. Lawton, Rochester, N. Y.
- 475,575.—Apparatus for the manufacture of salt. Charles F. Lawton, Arthur W. Lawton and Albert L. Lawton, Rochester, N. Y.
- 475,576.—Process of manufacturing salt. Charles F. Lawton, Arthur W. Lawton and Albert L. Lawton, Rochester, N. Y.
- 475,577.—Salt. Charles F. Lawton, Arthur W. Lawton and Albert L. Lawton, Rochester, N. Y.
- 475,586.—Process of solidifying liquid acids. Philip Mauro, Washington, D. C.
- 475,587.—Diffusion battery. George A. Mersick, Wilmington, Del.
- 475,602.—Apparatus for drying spent grain and the like. Friederich E. Otto, Dortmund, Germany.
- 475,609.—Copper smelting furnace. Benjamin Richards, Middle Bank, Swansea, Eng.
- 475,616.—Induline dye. Robert Senger, New York, N. Y.
- Prepared by mixing one molecule of induline with three molecules of oleic acid, and then heating the mixture to about 100° to 120° centigrade. An intensely black liquid of the consistency of castor oil, insol. in water, soluble in alcohol and benzine.
- 475,637.—Apparatus for evaporating brine. Theodore R. Timby, Washington, D. C.
- 475,670.—Process of purifying sewage. Francis R. Conder, Guilford, England.
- 475,713.—Compound for waterproofing. James Stewart, Philadelphia, Pa.
- 475,725.—Process of tempering and hardening metals. Joseph S. Durning, Ensworth, Pa.
- 475,728.—Apparatus for charging machines with liquified gas. Paul Gifford, Paris, France.

**475,737.**—Chemical compound for treating tobacco. George S. Yingling, Tiffin, Ohio.

The compound consists of gallic acid, tannic acid, extract of geranium and extract of licorice.

*Issued May 31, 1892.*

**475,757.**—Process of recovering glycerine and salt from spent soap lye. Albert Dorneier and Otto C. Hagemann, London, Eng.

**475,758.**—Process of recovering crude glycerine from spent soap lye. Albert Dorneier and Otto Hagemann, London, Eng.

**475,774.**—Apparatus for conducting and screening gases from metallurgical furnaces. Malvern W. Iles, Denver, Col.

**475,779.**—Grain separator. James M. King, Rochester, Minn.

**475,784.**—Apparatus for boiling soap. Joel W. Martin, Hartford, Conn.

**475,794.**—Machine for decorticating fiber-bearing plants. John Von Oven and Charles F. Pankinn, Charleston, S. C.

**475,795.**—Apparatus for condensing steam. William E. Prall, Washington, D. C.

**475,797.**—Secondary battery electrode and process of making the same. Anthony Reckenzaune, London, Eng.

**475,819.**—Flax and hemp brake. John T. Smith, Heron Lake, Minn.

**475,824.**—Process of roasting ores. Charles W. Stickney, Butte City, Mont.

The process "consists in injecting steam at a red or higher heat into a furnace containing ore, whereby sulphuretted hydrogen is generated, and roasting another portion of ore by means of air, whereby sulphurous acid gas is generated, and mingling these gases in contact with water holding clay in suspension, whereby sulphate of alumina is generated and its solution mingled with the gases."

**475,853.**—Process of manufacturing beer. Christian Feigenspan, Newark, N. J.

**475,856.**—Fruit press. Samuel Grossman, Chicago, Ill.

**475,876.**—Automatic smoke consuming furnace. Michael J. Lynn, Rochester, N. Y.

**475,897.**—Fireworks. Carl Schmidt, Berlin, Germany.

A composition for star fireworks, consisting of steel chips, charcoal, nitrate of lead, shellac and spirits.

**475,898.**—Rheostat. Frederick W. G. Schneider, Toronto, Canada.

**475,907.**—Process of refining silver sulphides. William G. Waring, Silver City, N. Mex.

**475,915.**—Process of preparing clay. Phineas Arnold, Canal Dover, Ohio.

**475,961.**—Rectifying apparatus. Bogdan Hoff. Jaroslau and Julius Frommel, Parolosian, Austria-Hungary.



- 475,972.**—Carburetor. Edgar B. Badlam, San Francisco, Cal.
- 476,085.**—Apparatus for cleaning and concentrating ores. William Clancy, Anaconda, Mont.
- 476,073.**—Still and process. Philip Rodes, Greenfield, Va.
- 476,091.**—Process of purifying metals. Benjamin Talbot, Chattanooga, Tenn.
- 476,092.**—Process of refining metals. Benjamin Talbot, Chattanooga, Tenn.
- 476,093.**—Tester for spirituous liquors. Kenner Taylor, Frankfort, Ky.
- 476,095.**—Apparatus for calibrating water meters. John Thompson, Brooklyn, N. Y.
- 476,096, 476,097, 476,099, 476,100.** } Proportional water meters. John Thompson, Brooklyn, N. Y.
- 476,098.**—Method of and apparatus for maintaining a proportional flow of fluids through separate chambers. John Thompson, Brooklyn, N. Y.
- 476,103.**—Positive proportional meter. } John Thompson,  
**476,104.**—Proportional water meter. } Brooklyn, N. Y.  
**476,102.**—Disk water meter. }
- 476,160.** } Machines for testing fibrous plants. James L. Myers, New Orleans, La.  
**476,161.** }
- 476,166.**—Dry Closet. Willis D. Over, Bryan, Ohio.
- 476,177.**—Hydrocarbon burner. Edward J. Thompson, Antrim, N. H.
- 476,231.**—Purifier and separator. Jonathan Mills, Columbus, Ohio.
- J. F. G.