

Abstracts of American Patents Relating to Chemistry.

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

Issued April 5, 1892.

472,026.—Galvanometer. Sigmund Bergmann and George A. Scott, New York, N. Y.

472,033.—Process of enameling sheet metal articles. Hubert Claus, Thale, Germany.

472,076.—Regenerative metallurgical furnace. Henry C. Rew, Chicago, Ill.

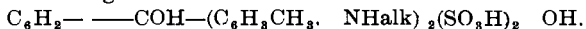
472,077.—Apparatus for the manufacture of gas. Henry C. Rew, Chicago, Ill.

472,085.—Method of and appliance for the collection and utilization of carbonic acid gas and other products given off during the process of fermentation. Chas. R. C. Tichborne, Alfred E. Darley, Marmaduke F. Purcell and Samuel Geoghegan, Dublin, Ireland. In this process the purified carbonic acid is finally compressed to liquefaction.

472,091.—Manufacture of blue dye. Arthur Weinberg, Frankfort-on-the-Main, Germany.

A mixture of monoalkylated orthotoluidine with metaoxybenzaldehyde is heated in presence of a condensing agent, such as hydrogen chloride, the product is then treated with strong sulphuric acid until the aqueous sol. of the sample is no longer precipitated by sodium acetate, and finally the leuco sulpho acids are oxidized by means of an alkaline bichromate, or of peroxides, such as lead peroxide.

The blue coloring matter has the constitution.



A dark blue powder easily sol. in water, difficultly sol. in spirits. The blue aqueous solution is not altered by addition of sodium carbonate but if strongly acidulated the color turns into yellow. Reducing agents transform the color into a leuco compound.

472,121.—Manufacture of yellow dyes. Meinhard Hoffmann, Mainkur, Germany. "The yellow dye-stuff derived from tetrazonaphthalinebeta-disulpho acid and phenols, which is easily soluble in water, difficultly sol. in spirit, dissolving with a brilliant violet shade in strong sulphuric acid from which on diluting with some water the free acid of the dye-stuff separates in the form of a dark green precipitate, which by further addition of water, is dissolved with a yellow shade."

472,144.—Gas stove. James L. Sharp, New Rochelle, N. Y.

472,191.—Apparatus for manufacturing gas. Charles W. Isbell, New York, N. Y.

472,198.—Gas burner for heating purposes. Peter H. Nelson, Chicago, Ill.

472,209.—Vacuum pan. John R. Farnharn, Brooklyn, N. Y.

472,226.—Hydrocarbon burner. Miles E. Ray, Toledo, Ohio.

472,230.—Process of decorating glass. John H. Scharling, Newark, N. J.
The process consists in repeatedly pouring a solution of metallic salts over the article to be decorated until the same is completely covered, "slowly turning or moving the article during such process, and finally subjecting said article to the action of an electroplating bath."

472,231.—Hydrocarbon burner. George H. Scott, Worcester, Mass.

472,255.—

472,556.— } Temperature regulators. Lucien F. Easton, La Crosse, Wis.

472,261.—Thermo-electric battery. Robert J. Gülcher, Berlin, Germany.

472,267.—Process of dyeing. Ernst Michaelis and Carl Henning, Cottbus, Prussia, Germany.

The process "consists in immersing the textile material in separate quantities in a bath consisting of an 'acid' solution, formed by heating zinc with sodium bisulphite mixed with caustic soda and indigo, adding to the bath from time to time additional amounts of the said 'acid' solution as additional quantities of the textile material are immersed therein, so that the bath may have a uniform alkaline reaction, and immersing each quantity of textile material as it comes from the bath in oxygenated water, whereby the indigo is oxidized."

472,322.—Composition for retarding the solidification of calcined gypsum. Edward Watson, Grand Rapids, Mich.

472,323.—Drying Apparatus. Richard White, London, England.

472,327.—Dye-tub. Chas. L. Anger, Paterson, N. J.

472,352.—Compound for insulating electric wire. Louis Hill, Waterbury, Conn.

Consists of "pittigite pitch, candle tar, coal tar, asphalt pitch and rosin."

472,362.—Machine for bottling aerated liquid. Frederic J. Johnston, Cambridge, and Nelson F. Hallett, Boston, Mass.

472,367.—Crushing and grinding mill. George S. Knapp, Chicago, Ill.

472,368.—Bottle washing machine. Lebbeus A. Koplín, Akron, Ohio.

472,369.—Facing compound. Charles F. Lawton, Rochester, N. Y.

472,382.—Milk tester. Ralph Messenger, Unadilla, N. Y.

472,387.—Method of treating and concentrating pyritiferous ores. James W. Neill, Leadville, Col.

472,394.—Vapor burner. Charles A. Pope, Cleveland, Ohio.

- 472,421.**—Apparatus for disintegrating, mixing and other purposes. James A. Young, Boston, Mass.
- 472,422.**—Metallurgical process. José B. Alzugaray, Porto, Portugal.
- 472,433.**—Machine for classifying or sizing ores and like materials. Thomas Clarkson, London, Eng.
- 472,498.**—Apparatus for condensing nitric acid. Oscar Guttman. London, Eng.
- 472,502.**—Apparatus for coating metal plates. Edwin R. Jones, Swissvale, Pa.
- 472,506.**—Spirit lamp. Abram C. Monfort, Pawtucket, R. I.
- 472,511.**—Wall plaster. Walter Robinson, Syracuse, N. Y.

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- 472,547.**—Filter pump. Hermann Nordmeyer, Breslau, Germany.
- 472,614.**—Process of distilling carbonaceous material. Benjamin Brazelle, St. Louis, Mo.
- 472,621.**—Process of making coke. Frederick J. Jones, Bedford, Eng.
- 472,641.**—Apparatus for purifying water. Leroy S. Lewis, East Hartford, Conn.
- 472,644.**—Food product. Clifford Saville, New York, N. Y.
- 472,668.**—Process of making aluminates of alkalies. Emil Fleischer, Wiesbaden, Germany.
- 472,682.**—Means of dry separation of materials of different specific weight and different size. Hermann Pope and Wilhelm Henneberg, Hamburg, Germany.
- 472,691.**—Art of making tin plates. George H. Benjamin, New York, N. Y.
- 472,697.**—Furnace. Simeon Bunn, Belleville, Ill.
- 472,701.**—Process of tanning hides. Hermann Endemann, Brooklyn, N. Y.
- The process consists in treating the hides with a chrome solution and then subjecting them to the action of a solution of cuprous salt.
- 472,738.**—Brick-kiln furnace. William H. Martin, Covington, Ky.
- 472,753.**—Ore screening apparatus. Thomas A. Edison, Llewellyn Park, N. J.
- 472,759.**—Puddling furnace. Henry B. Hall, Hero, Pa.
- 472,773.**—Refrigerator. William Simms, Minneapolis, Minn.
- 472,785.**—Gas making apparatus. Charles R. Collins, Philadelphia, Pa.
- 472,812.**—Art of making portraits or other pictures. Francisco Piera y de Mata, Havana, Cuba.
- 472,820.**—Phosphate washing machine. George W. Roberts, Chisholm's Island, S. C.

472,828.—Iodine derivatives of acetyl paramidophenetole. Ludwig Scholwein, Berlin, Germany.

Process of obtaining iodophenin by combining a solution of acetyl paramidophenetole with a solution of iodine.

Iodophenin melts under decomposition at 130° C., is readily soluble in glacial acetic acid, not so readily in acetic acid of 50%, quite soluble in alcohol, difficultly soluble in benzole and chloroform, nearly insoluble in water, readily yields its iodine to an alkali or a boiling solvent, and has the empirical formula $C_{20}H_{25}N_2O_4I_3$.

472,830.—Combined churn and butter worker. Eric Silen, Kelso, Wash.

472,848.—Ore-roasting furnace. George F. Bartlett and Augustus J. O'Neill, Butte City, Mont.

472,910.—Safety vessel for oils. Charles J. Ryder, Patchogue, N. Y.

472,925.—Emulsion. Simon de Jager, Denver, Col.

472,926.—Continuous brick kiln. William Johnson, Leeds, Eng.

472,936.—Cooling room for breweries. Charles D. Stanford, Boston, Mass.

472,945.—Ornamenting candles. Thomas V. Forster, Avalon, Pa.

472,949.—Injector. Franz Kelch, Berlin, Germany.

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472,980.—Device for preserving dried flowers. Frederick T. Brown, Colorado Springs, Col.

472,981.—Smoke consumer. William H. Burden, Cleveland, Ohio.

472,984.—Machine for making asphalted sheet metal. John P. Culver, Los Angeles, Cal.

472,988.—Machine for decorticating jute, ramie and other fibrous plants. Felix B. Fumery, Galveston, Tex.

472,989.—Process of purifying cane juice. William V. Fry, Lambayeque, Peru.

A decoction of eucalyptus in treating the juice.

473,005.—Centrifugal cream separator. Carl A. Hult, Stockholm, Sweden.

473,006.—Receptacle for aerated liquids. Joseph D. Iler, Kansas City, Mo.

473,009.—Method of and apparatus for lining water channels. Charles H. Lyon, Ballance, near Ballan, Victoria.

473,013.—Apparatus for separating natural gas from oil, water, etc. William Moore, Kokoin, Ind.

473,046.—Rotary water meter. Theodore Woollens, Jr., Cheyenne, Wyo.

473,066.—Ore separator. Simon G. Elliott, Quincy, Mass.

473,081.—Funnel. Rudolph Rahn, St. Louis, Mo.

- 473,104.**—Amalgamating apparatus for separating gold and other metals from their ores. George J. Atkins, London, Eng.
- 473,105.**—Electrolytic apparatus for separating gold and other metals from their ores. George J. Atkins, London, Eng.
- 473,106.**—Apparatus for pickling metal plates. William H. Atkinson and Daniel M. Somers, Brooklyn, N. Y.
- 473,110.**—Machine for decorticating ramie. Pierre P. Faure, Limoges, France.
- 473,117.**—Electrode for use in electro-metallurgical processes. Paul Héroult, Neuhausen, Switzerland.
- 473,118.**—Apparatus for producing aluminium or other metals. Paul Héroult, Laupfen, Switzerland.
- 473,143.**—Gas retort charger. André Coze, Rheims, France.
- 473,144.**—Apparatus for charging gas retorts. André Coze and Alex. Lencauchez, Paris, France.
- 473,145.**—Gas retort. André Coze and Alexandre Lencauchez, Paris, France.
- 473,146.**—Secondary battery. Harry E. Dey, New York, N. Y.
- 473,147.**—Secondary battery. Harry E. Dey, New York, N. Y.
- 473,156.**—Refrigerating machine. Daniel L. Holden, New York, N. Y.
- 473,157.**—Refrigerating apparatus. Daniel L. Holden, New York, N. Y.
- 473,164.**—Apparatus for distilling water. William Rochlitz, Chicago, Ill.
- 473,165.**—Oil burning device. Henry T. Russell, Chicago, Ill.
- 473,176.**—Refrigerating apparatus. Daniel L. Holden, New York, N. Y.
- 473,186.**—Method for producing metallic zinc.
- 473,252.**—Furnace for burning liquid fuel. Stephen Fox, Jr., Bridgeton, N. J.
- 473,266.**—Machine for cleaning and soaping fabrics. Ethelbert A. Rusden, Providence, R. I.
- 473,280.**—Crushing mill. Frederick A. Wiswell, Lynn, Mass.
- 473,293.**—Gas engine. James A. Charter, Sterling, Ill.
- 473,301.**—Brick and tile cutting machine. Richard A. Drawdy, Jacksonville, N. Y.
- 473,306.**—Compound of sulphurated oils. Walter D. Field, Millburn, N. J. Compounds consisting of "the glycol or glyceryl ethers of the unsaturated fatty acids, combined with sulphur to form sulphur-balsam and pyroxyline or nitro-cellulose."
- 473,322.**—Centrifugal machine. John Laidlaw, Glasgow, Scotland.
- 473,326.**—Oil purifier. Rudolph Metz, Philadelphia, Pa.
- 473,331.**—Medicinal food. Andrew D. McKay, Liverpool, England. This food consists of dextrin, egg albumen, pepsin, iron hypophosphite, calcium hypophosphite, and sodium hypophosphite.

473,350.—Apparatus for the manufacture of gas. Gottlieb Scharfe, Annapolis, Md.

473,382.—Method and apparatus for making metal castings. William L. Clark, Sioux City, Iowa.

473,385.—Amalgamator. Wilton E. Darrow, Amador, Cal.

473,391.—Paint. Julius Haake, Radebeul, Germany.

473,395.—Art of amalgamating silver ores. Alexis Jarvin, San Francisco, Cal.

473,421.—Machine for pulverizing sods, manure, etc. Benjamin F. Knapp, Madison, N. J.

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473,449.—Ore concentrator. Gustavis L. Cudner, New York, N. Y.

473,450.—Combined ore separator and amalgamator, Gustavis L. Cudner, New York, N. Y.

473,451.—Placer disintegrator and amalgamator. Gustavis L. Cudner, New York, N. Y.

473,452.—Hot air evaporator or drier. John H. Crozier, Bean's Station, Tenn.

473,453.—Red dye. Max Epting, Höchst-on-the-Main, Germany.

A dye "derived from triamidotriorthotolylcarbinol, which in the form of its sodium salt is a green mass having metallic lustre, of easy solubility in water, but insoluble in absolute alcohol."

473,463.—Plunge battery. James H. Howard, Medford, Mass.

473,466.—Manufacture of steel ingots. Charles W. Kennedy and John W. Grantland, Philadelphia, Pa.

473,467.—Process of making naphthosulfondisulphonic acid. Hans Kuzel, Höchst-on-the-Main, Germany.

473,473.—Machine for centrifugally treating molten material. Orrin B. Peck, Chicago, Ill.

473,475.—Combination hot-water and hot-air heater. Frank C. Peteler, Minneapolis, Minn.

473,489. } Sewerage System, etc. Stephen E. Babcock, Little Falls,

473,490. } N. Y.

473,498.—Carburetor. Henry L. Cruttenden, Northfield, Minn.

473,505.—Soap press. Charles Hupf, Cincinnati, Ohio.

473,506.—Ore concentrator. Frank M. Her, Marion, Ohio.

473,509.—Vacuum pump. Whitcomb L. Judson, New York, N. Y.

473,511.—Centrifugal machine for refining starch. George A. Kerr, Columbus, Ind.

473,514.—Induction discharge protector for welding apparatus. Hermann Lemp, Lynn, Mass.

473,530.—Agitator. Richard Smith, Sherbrooke, Canada.

- 473,533.**—Amalgamator. Bryan Tyson, Washington, D. C.
- 473,560.**—Salt grainer. Nathan S. Scoville, Warsaw, N. Y.
- 473,631.**—Fumigator. Hugo F. Loepere, Buffalo, N. Y.
- 473,636.**—Temperature regulator. James F. McElroy, Albany, N. Y.
- 473,644.**—Concentrator. Adolph Schulenburg, San Francisco, Cal.
- 473,659.**—Art of distillation and apparatus used therefor. Arthur W. Ellis, London, Eng.
- 473,679.**—Coloring and burnishing composition. James F. Thompson Rockland, Mass.
- 473,685.**—Gas engine. Carl W. Weiss, Brooklyn, N. Y.
- 473,705.**—Process of treating wood to prevent decay. Marcus A. Luckerbach, Denver, Col.
- 473,722.**—Safety vent for steam apparatus. William C. Baker, New York, N. Y.
- 473,725.**—Stone or ore crushing machine. Edgar H. Booth, San Francisco, Cal.
- 473,741.**—Method for smelting cast iron borings, turnings, and shavings. Jens Hansen, Helsingör, Denmark.
- 473,753.**—Making relief plates by photography. Jácob Husink, Prague, Austria, Hungary.
- 473,767.**—Process of improving oil paintings by photography. Ludwig Meyer, Berlin, Germany.
- 473,776.**—Method of and means for bottling liquids and sealing bottles. William Painter, Baltimore, Md.
- 473,790.**—Zinc foil and method for manufacturing the same. Albert Sichel, New York, N. Y.
- 473,793.**—Cooling apparatus. Sherman L. Smith, Plymouth, Pa.
- 473,805.**—Tanning compound. Samuel W. Wright, Mountain Grove, Mo.
- 473,828.**—Device for cementing wells and cisterns. William H. H. Davis, Oakfield, Mich.
- 473,834.**—Fuel press and cutter. Gustave Frank, New York, N. Y.
- 473,841.**—Manufacture of carbon blocks. Leon Hulin, Frozes, France.
- 473,860.**—Art of making mortar. Edward T. Warner and John C. Curry, Wilmington, Del.
- 473,866.**—Process of obtaining metals from their ores or compounds. Chas. S. Bradley, Yonkers, N. Y.
- 473,876.**—Condenser for refrigerating or ice making machines. Horace F. Hodges and David J. Havenstrite, Boston, Mass.
- 473,884.**—Process of and apparatus for welding metals. Charles E. Lipe and John A. Pross, Syracuse, N. Y.
- 473,893.**—Preserving animal food. James W. Cameron, New York, N. Y.

J. F. G.