

Abstracts of American Patents Relating to Chemistry.

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

January 5, 1892.

466,323.—Process of manufacturing water gas. Walton Clark, Philadelphia, Pa.

466,325.—Method of enameling sheet metal ware. Hubert Claus, Thale-in-the Harz, Germany.

The process consists in “coating the article with a groundwork of enamel; second, treating the surface thus coated with a repellent solution of ammonium sulphate and epsom salts; third, coating the article with a coarsely ground gray enamel and finally glazing or coating the article with a thin paste of translucent enamel.”

466,441 and 466,442.—Apparatus and process for hardening steel. George F. Simonds, Fitchburg, Mass.

466,452.—Process of reducing oxides of iron. Thomas S. Blair, Jr., Allegheny, Pittsburg, Pa.

The heated oxides are subjected to a current of a reducing gas heated to the temperature of the ore when at a red heat. The reduced sponge is then subjected to a current of a cold non-oxidizing gas until sufficiently cool to prevent oxidation when exposed to the atmosphere.

466,455.—Method of forming alloys. Sherwood E. Chusman, Kansas City, Mo.

The method consists in “precipitating copper from a solution of its sulphate, adding mercury, and then an insoluble arsenite suspended in alkali liquid to the amalgam, followed by the addition of the metal with which, in addition to copper, it is desired to form an alloy, and subsequently removing the mercury.”

466,460.—Art of electrolytic decomposition. Thomas A. Edison, Menlo Park, N. J.

Substances not readily decomposed at a low temperature are confined in a suitable vessel and heated sufficiently to vaporize the material and cause pressure in the vessel, thus raising the temperature above the boiling point of the liquid. An electric current is then passed through the highly heated substance.

466,483.—Transfer copying compound. Ernest Asmy, Milwaukee, Wis.

A preparation compounded of glycerine, gum arabic, isinglass, ammonia, oil, alcohol and wax.

466,484.—Centrifugal liquid separator. Clemens Von Bechtolsheim, Stockholm, Sweden.

466,495.—Process of separating nickel from its ores. Henri L. Heuenschmidt, Petit-Querilly, France.

466,498.—Hydrocarbon burner. John A. Lannert and William R. Jeavons, Cleveland, Ohio.

466,513. }

466,514. } —Ore separators. Charles J. Reed, Orange, N. J.

466,515. }

466,524.—Method of preserving corpses. Graham H. Hanrick, Philippi, W. Va.

A cavity of the body is opened and treated to a solution of saltpetre and then the entire body subjected to the fumes of burning sulphur in a suitable chamber.

466,534.—Art of preparing and transferring photographic and other designs for engraving. William J. Charlton, Providence, R. I.

466,557.—Process of duplicating typewritten work. Albert B. Dick, Chicago, Ill.

466,579.—Process of and apparatus for treating garbage. Charles F. Simonin and Isaac M. Simonin, Philadelphia, Pa.

466,603.—Gas producer. Charles Fiesse, New York, N. Y.

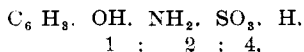
466,632.—Apparatus for refining sugar in loaf form. Carl Steffer, Vienna, Austria, Hungary.

466,664.—Electric Battery. Patrick B. Delaney, South Orange, N. J.

466,676.—Brick kiln. John B. Griswold, Zanesville, Ohio.

466,707.—Process of preparing phenol sulphonates of oxychinoline. Josef Ziegler, Bieberich, Germany.

The process consists in "the production of ortho-oxychinoline by digesting ortho-amidophenol-parasulphonic acid,



with ortho-nitrophenol-parasulphonic acid and with glycerine and sulphuric acid, precipitating from the product of the reaction, by means of soda, the oxychinoline formed, and purifying the same and heating the oxychinoline so obtained with ortho- or para-phenol sulphonic acid in molecular proportions until the combination of the two bodies is complete.

466,708.—Process of preparing oxychinoline sulphate. Josef Ziegler, Bieberich, Germany.

466,709.—Process of purifying water. Joseph A. Bradburn, Edward N. Trump, and John D. Pennock, Syracuse, N. Y.

The sulphates are precipitated with barium bicarbonate and the carbonates by milk of lime, thus removing the scale forming substances.

466,720.—Process of obtaining insoluble chlorides by electrolysis. Stanley C. C. Currie, Philadelphia, Pa.

The method of producing insoluble chlorides direct from the metals consists in constituting the metal or metals to be converted into a chloride or chlorides, the anode in an electrolytic cell in a neutral chloride solution, and then converting the metals into an insoluble chloride or chlorides.

466,753.—Ore slimer. Edgar A. Hockley, Ouray, Ohio.

January 12, 1892.

466,782.—Plastering composition. Arthur L. Grant, Toronto, Canada.

A composition of sodium or potassium oleate united with lime, suitable for mixture with plastering compositions.

466,820.—Battery-zinc and method of making the same. John Beattie, Jr., Fall River, Mass.

An amalgam of zinc, mercury, and magnesium. Divided zinc and mercury are subjected to the action of a solution of sulphuric acid and water until partial amalgamation takes place. The liquid is then drawn off and the metal heated until it melts, after which a quantity of magnesium is added and the whole cast into blocks or strips; a number of these are then added to pure molten zinc and then cast into the required form.

466,826.—Blue red dye. Edward Hepp, Bieberich-on-the-Rhine, Germany.

A red crystalline compound represented by the formula $C_{28}H_{16}N_8(SO_3H)_8$, being the red basic coloring matter termed "phenyl-rosinduline." With concentrated sulphuric acid it gives a strong green solution. It is easily soluble in cold water, but completely insoluble in sulphuric or hydrochloric acid diluted with about the same quantity of water. Its potassium, sodium and ammonium salts are crystalline and very soluble in cold water, are precipitated from aqueous solutions by means of common salt and impart red-bluish shades to wool.

466,841.—Red azo dye. Moritz Ulrich, Elberfeld, Germany.

The azo dye which results in combining molecular proportions of toluidine sulpho acid after diazotation and of the dihydroxynaphthaline monosulphonic acid described in patent No. 444,679. The dye in a dry state is a gray-violet amorphous powder, is easily soluble in water with bluish-red, exquisitely clear and pure in color. Readily sol. in soda-lye and ammonia with red color, while in conc. sulphuric acid it gives a deep bluish-violet colored solution.

466,852.—Disulpho-acid of phenyl-rosinduline. Edward Hepp, Bieberich-on-the-Rhine, Germany.

466,881.—Ore feeder. John R. Russell, San Francisco Cal.

466,882.—Rotary ore roaster. Julius E. Shettle, Salt Lake City, Utah.

466,900.—Absorbent of nitro-glycerine. Lewis Brown, Landing, N. J.
Absorbent is a mixture of nitrate of soda, wood pulp, glue and magnesia.

466,913.—Carbonate of guaiacol and creosol. Bueno R. Seiffert, Rodebeul, Germany.

A colorless crystalline powder, insoluble in water and soluble in alcohol and ether.

466,927.—Process of manufacturing steel. Henry C. S. Dyer, Westhope, England.

The process consists in "charging scrap or pig iron and scrap along with carbon in the form of coke or charcoal or other carbonaceous matter into a basic lined open-hearth furnace, then melting the metal in the charge and finally boiling down the charge with iron ore until the metal contains the percentage of carbon desired."

466,982.—Apparatus for disintegrating vegetable substances. John MacCormack and Harry L. Van Zile, Albany, N. Y.

467,041.—Method and apparatus for the manufacture of lead fibre. Norman K. Morris, Denver, Colo.

467,042.—Method of and apparatus for producing lead carbonate. Norman K. Morris and John W. Bailey, Denver, Colo.

467,090.—Method of transferring designs to glass, porcelain or other surfaces. Albert E. Frank and Edward H. Hoad, Pittsburg, Pa.

Paper is first coated with a soluble surfacing or glaze, then with a less soluble surfacing or glaze, the designs are printed on said coated surface, applied directly to the surface to be decorated, and moistened to permit removal of the paper.

467,140.—Alloy. Edward C. Miller, East Orange, N. J.

An anti-friction metal consisting of lead, eighty parts; antimony, fifteen parts; tin, five parts.

467,142.—Chemical fire extinguisher. William F. Singer, Carthage, N. Y.

January 19th, 1892.

467,147.—Process of manufacturing steel. Thomas S. Blair, Jr., Allegheny, Pa.

467,158.—Apparatus for treating ores. John D. Coplen, Denver, Colo.

467,162.—Tetrazo dye. Carl Duisberg, Elberfeld, Germany.

A direct dyeing tetrazo dyestuff made by "combining with one molecular proportion of dianisidine after its diazotation, one molecular proportion of beta-naphthol disulpho acid R, and then one molecular proportion of alpha-naphthol alpha-monosulphonic acid (Neville-Winther.)

A blackish brown amorphous powder with copper like lustre, sparingly sol. in cold water, more readily, with greenish blue color, in hot water; in solutions of the fixed alkalis it dissolves with bluish-red, but in ammonia

with reddish violet and in conc. sulphuric acid with greenish blue color, from which latter solution dark blue flakes separate on the addition of large quantities of water. Mineral acid causes a blue precipitate in the aqueous solution of the dyestuff.

467,167.—Disinfecting apparatus. Albert C. Haver, West Bay City, Mich.

467,169.—Filament for incandescent electric lamps. Philip Hickley, Evanston, Ill.

A filament of the carbonized root of the *Oryza sativa* or rice plant.

467,170.—Concrete mixing machine. Wright S. Hotchkins, Wichita, Kans.

467,171.—Process of chloridizing ores of precious metals. Charles A. Hoyt, Butte City, Mont.

467,200.—Process of treating leather. Federick Riegert, St. Joseph, Mo.

Process of rendering leather pliable and waterproof; consists in first drying the cleaned leather, then applying dissolved rubber or Brazilian gum in a liquid state to the heated leather. then applying oil thereto and finally rubbing powdered soapstone to the leather thus treated.

467,233.—Process of electric metal working. Hermann Lenp, Lynn, and Walter S. Moody, Chelsea, Mass.

467,239.—Battery zinc. Charles B. Schoenmehl, Waterbury, Conn.

467,240.—Electric battery. Charles B. Schoenmehl, Waterbury, Conn.

467,264.—Method of purifying smoke. Albert Raymond, Chicago, Ill.

467,266.—Process of manufacturing gas. John H. Springfellow, London, England.

467,302.—Mixing machine for asphalt. John B. Pitchford, San Francisco and Augustus S. Cooper, Santa Barbara, Cal.

467,308.—Method of producing ferments. Ludwig Meyer, Stuttgart, Germany.

467,312.—Apparatus for separating gluten from slaughter house washings. Edward J. Pope, Eau Claire, Wis.

467,329.—Alloy. William J. Miles, Jr., Terre Haute, Ind.

A non oxidizing alloy composed of osmium, iron or steel, tungsten, nickel and aluminium.

467,356.—Enameling. Carl F. Pauls, Chicago, Ill.

467,361.—Process of treating powdery iron ore. Joel Wilson, Dover, N.J.

467,368.—Mill for crushing ores. William H. Coward, Bath, Eng.

467,372.—Galvanic battery. Fernand Gardson, Bordeaux, France.

467,378.—Art of manufacturing linoleum. Thomas Mitchell, London, Eng.

467,413.—Heating and puddling furnace. Owen Hughes, Cleveland, Ohio.

467,430.—Mash distilling apparatus. Wilhelm Paulzow, Revel, Russia.

467,484.—Electrolytical process and apparatus. Otto Stahlmann, Anacanda, Mont.

January 26th, 1892.

467,492.—Material for manufacturing paving blocks. Noble T. Barnes, Buffalo, N. Y.

467,493.—Method and apparatus for treating Yucca fiber. John C. Best and George W. Anderson, Raytown, Mo.

467,520.—Composition of matter for insulating purposes. David H. Piffard, Piffard, N. Y.

Compounded of rubber 5 parts, rosin 24 parts, and plaster of paris (or its equivalent) 26 parts.

467,543-44-45-46-47.—Apparatus for charging secondary batteries. Cyprien O. Mailloux, New York, N. Y.

467,569.—Ore concentrator. George J. Parker and Charley B. Walker, Trinidad, Colo.

467,575.—Disinfecting device. Alexander S. Force, Jersey City, N. J.

467,605.—Process of and apparatus for purifying gas. Frederick Bredel, Milwaukee, Wis.

467,641.—Process for preserving fruit. Maggie Marshfield, Chicago, Ill.

The process consists in steaming the fruit over sirup containing flavoring extract and allowing the drippings from the fruit to fall into the sirup, and when the fruit is thoroughly cooked and the sirup evaporated to the proper consistency adding the fruit to the sirup while both are hot.

467,645.—Magnetic separator. Francis H. Richards, Hartford, Conn.

467,673.—Carbonic acid gas generator. Patrick J. McGuire, Salem, Mass.

467,745.—Smoke consumer. David C. Adams, Toronto, Canada.

467,747.—Malt kiln. John F. Dornfeld, Watertown, Wis.

467,757.—Method of preparing and bottling wines. George W. Sessions, New York, N. Y.

467,800.—Process of tinning plate. James Gould, Jr., Maywood, Ill.

467,801.—Tinning. James Gould, Jr., Maywood, Ill.

467,833.—Magnetic separator. Francis H. Richards, Hartford, Conn.

467,890.—Duplicating stenciling material. William G. Fuetth, Newark, N. J.

J. F. G.