

Abstracts of American Patents Relating to Chemistry.

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

September 1, 1891.

458,561.—Method of extinguishing fires. George Dickson, Toronto, and David A. Jones, Beeton, Canada.

458,563.—Process of making caustic alkali. Francis Ellershausen, Hebburn-on-Tyne, Eng.

Solutions of sodium or potassium sulphide are passed through a filter bed composed of granulated sodium or potassium ferrate.

458,607.—Device for cooling liquids. Carl W. Weiss, Brooklyn, N. Y.

458,647.—Process of obtaining glycerine from soapmakers' waste. Joseph Van Ruyambeke, Chicago, Ill.

458,648.—Plant for treating soapmakers waste to obtain glycerine. Joseph Van Ruyambeke, Chicago, Ill.

458,652.—Electro-chemical transformer. Turner D. Bottome, Hoosick, N. Y.

458,663.—Manufacture of flexible photographic films. Henry M. Reichenbach and Samuel C. Passarant, Rochester, N. Y.

A flexible film support made by adding a distillate obtained from zinc chloride and fusel oil to a fluid solution of nitro-cellulose and camphor, and subsequently depositing and spreading such solution upon a rigid supporting surface and drying it.

458,726.—Chemical refrigerator. Ralph Hirsh, Syracuse, N. Y.

458,741.—Process of making ink. Edward Watson, Grand Rapids, Mich.

Coal tar and sulphuric acid are mixed in about equal proportions at a temperature not exceeding 200° F. and then washing out the acid and mixing with dilute alkali to the required consistency.

458,742. } —Compositions of matter for restraining the setting of plaster.

458,743. } Edward Watson, Grand Rapids, Mich.

458,744.—Manufacture of Fertilizers. Edward Watson, Grand Rapids, Mich.

Process of converting tank water into a practically dry non-deliquescent fertilizer by adding thereto a portion of other animal matter, an alkali, and drying the product.

458,764.—Method of producing marbled surfaces. Soren C. Madsen, Sleepy Eye, Minn.

Sand, broken glass and broken smoked glass are sprinkled over the surface of clear glass, placed over a sensitized surface and then exposed to the sun's rays or artificial light.

458,784.—Method of and apparatus for determining the temper of steel. Carl A. Caspersson, Forsbacka, Marzretchill, Sweden.

458,798.—Annumia still. George Stroli and George Usius, Detroit, Mich.

458,822.—Bleaching apparatus. E. B. Newcomb and F. A. and F. H. Cloudman, Cumberland Mills, Me.

458,823.—Amalgamator. Henry Cook, Philadelphia, Pa.

458,828.—Process of preparing skins. George H. Farthing, San José, Cal.

458,837.—Ore washer and concentrator. Charles F. Pike, Philadelphia, Pa.

458,840.—Waterproofed parchment paper. Emery Andrews, Kennebunk, Me.

458,887.—Apparatus for purifying water. Easton Devonshire, London, Eng.

458,937.—Apparatus for impregnating gases with vapors of volatile substances. Edward Blass, Essen-on-the-Ruhr, Germany.

458,946.—Water purifier. Easton Devonshire, London, Eng.

458,958.—Ore washer or concentrator. Chas. F. Pike, Philadelphia, Pa.

458,985.—Making vinegar. Gustav Sobotka, New York, N. Y.

458,986.—Process of producing clear wort. Gustav Sobotka, New York, N. Y.

September 8, 1891.

459,023.—Process of extracting antimony from ores. Curt Schreiber and Hans Knetsen, Broken Hill, New South Wales.

The crushed ore is subjected to the action of a solution of sodium sulphide and the antimony then precipitated in metallic form by electrolysis.

459,034.—Process of recovering tin from waste tin plate. Jean M. G. Bonnet, Paris, France.

The tin scrap is subjected to the action of an "alkaline solution" and simultaneously forcing hot air into said solution, thus getting the tin in the form of stannate, from which it is afterward recovered.

459,048.—Process of casting steel curwheels. William G. Richards, Boston, Mass.

459,066.—Process of treating fabrics for ornamentation. Gustav Glock, Newark, N. J.

459,123.—Apparatus for the distillation of tar. Frederick Lennard, East Greenwich, England.

459,136. } —Processes of preparing plates for purposes of utility or orna-

459,137. { ment. Hannibal Goodwin, Newark, N. J.

459,193.—Process of making ammonia and gas. Alphonse Hennin, Springfield, Ill.

Gas and ammonia are made simultaneously "by injecting air or oxygen and steam into a bed of incandescent fuel, controlling the temperature of the generator, first, by introducing such proportions of steam and oxygen or air as to maintain a zone of combustion at a temperature sufficient to reduce to carbonic oxide (CO) practically all the carbonic anhydride (CO₂) formed by the complete combustion of the fuel and to decompose practically all the steam so introduced in the blast; and, second, by regulating the supply of fresh fuel to maintain beyond the zone of combustion a zone of distillation, cool enough not only to allow the formation of ammonia, but to prevent the disassociation of that already formed, leading off the ammonia and gas and separating them by condensers, washers, or other suitable means."

459,236.—Process of purifying brine. Caleb G. Collins, Kearney, N. J.

The brine is purified by "rendering the impurities insoluble by subjecting the brine to a current of electricity having an electromotive force not exceeding two and one-half volts, sufficient to decompose the impurities in the brine, but below the intensity necessary to decompose the sodium chloride in the brine," etc.

459,267.—Centrifugal concentrator for minerals, etc. Thomas Clarkson, London, England.

459,284.—Sterilizing apparatus. Johann F. H. Gronwald and Emil H. C. Oehlmann, Berlin, Germany.

459,302.—Sterilizing apparatus. Emil H. C. Oehlmann and J. H. C. Gronwald, Berlin, Germany.

459,315.—Centrifugal separating machine. Richard Stanfield, Edinburgh, Scotland, and Thomas Clarkson, London, England.

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459,475.—Brine evaporating apparatus. Lowthian Bell, Northallerton, England.

459,494.—Composition of matter for the purification and strengthening of iron and cast steel. Charles L. Hartsfeld, Newport, Ky.

459,496.—Method of extracting cane juice and apparatus therefor. Alfredo Leblanc, Havana, Cuba.

459,556.—Process of electrolytically obtaining zinc. Alexander Watt, London, England.

459,575.—Process of making phosphoric acid. Charles Glaser, Baltimore, Md.

459,579.—Carburetor. George Hargreaves, James P. Scranton, Edward W. Porter, Detroit, Mich.

459,611.—Method of uniting solderable surfaces with aluminium. Thomas G. F. Dolby, Elgin, Ill.

459,632.—Vulcanizing apparatus. William E. Hathaway, Hornellsville, N. Y.

459,639.—Amalgamator. Peter B. Mathiason, St. Louis, Mo.

459,654.—Diffusion apparatus. Reginald M. Sandys, New Orleans, La.

459,659.—Ore crusher. August H. Schierholz, San Francisco, Cal.

459,684.—Ore concentrator. Andrew Fraser, San Francisco, Cal.

459,688.—Process of making soda with strontium salts.

Sodium or potassium hydrate are produced by reacting with the respective sulphates upon strontium hydrate, recovering the strontium by treatment with magnesium carbonate, followed by heating the strontium carbonate thus produced in an atmosphere of steam, etc.

459,693.—Fluid-fuel limekiln. Walter B. Wright, Chicago, Ill.

459,712.—Automatic gas generating machine. William F. Singer, Carthage, Syracuse, N. Y.

September 22, 1891.

459,744.—Mechanical dyeing apparatus. Thomas A. Clough, Philadelphia, Pa.

459,751.—Compound for preserving ships' bottoms, etc. Beau Hooker, San Diego, Cal.

459,799.—Kiln. Sterling G. Valentine, Lebanon, Pa.

459,858.—Ore concentrator. Chas. E. Seymour, Hurley, Wis.

459,897.—Moth-proofed hair and process of preparing the same. John Ruch and John Ruch, Jr., Philadelphia, Pa.

459,925. Gas generator. Chas. F. Cattelli, Darby, Pa.

459,946.—Manufacture of white lead. David V. Kyte, Indianapolis, Ind.

A metallic lead anode is decomposed "by a current of electricity in an acid electrolyte to form oxygen-bearing salts of lead, then rendering the electrolytic solution neutral, or nearly so, and treating the electrolyte with carbon dioxide for the purpose described."

459,993.—Process of tanning. Henry Churchill, Rochester, N. Y.

460,004.—Apparatus for the manufacture of phosphorus and alkaline silicates. Louis M. C. Foliedesjardins, Toulouse, France.

460,028.—Method of and apparatus for manufacturing ice. Edward A. Quisenberry, Lexington, Va.

460,028.—Manufacture of ice. Edward A. Quisenberry, Lexington, Va.

460,030.—Apparatus for deaerating water. Edward A. Quisenberry, Lexington, Va.

460,056.—Process of manufacturing a composition applicable for electrical insulating purposes. Ernst Fahrig, London, England.

460,086.—Artificial horn and method of producing the same. William Harvey, Philadelphia, Pa.

Consists of plastic materials such as celluloid, pyroxyline, or zylonite, etc.

September 29, 1891.

460,105.—Artificial stone, cement, and plastering composition. Edgar H. Benedict and Francis G. Bates, Philadelphia, Pa.

460,112.—Apparatus for coating wire with other metal. John Coffin, Johnstown, Pa.

460,122.—Process and apparatus for generating electricity. Thomas A. Edison, Menlo Park, N. J.

460,137.—Ammonia still. Daniel L. Holden, New York, N. Y.

460,186.—Process of making dimethylphenylpyrazolone. Ludwig Scholvien, Berlin, Germany.

Molecular quantities of methylphenylpyrazolone and sodium methyl sulphate are heated in presence of hydriodic acid and of a diluent.

460,193.—Smelting furnace. William L. Austin, Toston, Mont.

460,195.—Artificial stone. George H. Blake, Portland, Me.

Composed of graphitic slate and an alkaline silicate.

460,227.—Insecticide. Richard Wheeler, San Francisco, Cal.

Consists of lime, sulphur and salt.

460,271.—Process of filtration. John Sutton, Islip, N. Y.

460,305.—Amalgamating apparatus. Homer W. Fiske, New York, N. Y.

460,311.—Filter. Benjamin F. Perkins, Holyoke, Mass.

460,320.—Cereal food and process of producing the same. James A. Currie, Springfield, Ohio.

460,354.—Apparatus for electrolytically separating metals from ores. Werner von Siemens, Berlin, Germany.

460,358.—Method of decorating glass articles. William Buttler, Washington, Pa.

460,370.—Process of extracting bromine. Herbert H. Dow, Cleveland, Ohio.

The bromine is first freed from its chemical combination, then separated from the brine by means of an air blast, and forcing the bromine laden air through a metal or substance that will combine with the bromine, thus producing a bromide, etc.

460,377.—Process of making presser pads for lasting machines. David Lake, Hornellsville, N. Y.

460,378.—Filter. Prosper A. Maignen, London, England.

460,405.—Process of treating iron. John A. Stephan and Richard Southerton, Birmingham, England.

Process of incorporating a mixture of emery and ammonia alum with the molten metal during the puddling operation.

460,509.—Process of preparing and tempering slurry for portland cement. George H. Kalteyer, San Antonio, Texas, and George W. Bartholomew, Jr., Bellefontaine, Ohio.

J. F. G.