

Abstracts of American Patents Relating to Chemistry.

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

Issued May 5th, 1891.

451,487.—Process for making Paris-green. John C. Jessup, Dighton, Mass.

451,502.—Blue dye. Johannes Mohler and Carl A. Mayer, Basle, Switzerland.

A sulpho-acid derived from tannin, aniline and nitroso-dimethylamine having the form of dark crystalline powder insoluble in acidulated water, but slightly soluble in pure cold water, and with difficulty soluble in boiling water, and combined with alkalis it forms salts that are readily soluble in either warm or cold water.

451,531.—Process of neutralizing sulpho-chlorinated oils. Adolph Sommer, Berkeley, Cal.

Previous to the addition of chloride of sulphur an oxide or other compound of manganese is incorporated with the oil to be heated.

451,540 and **451,541.**—Secondary battery. George A. Washburn, Cleveland, Ohio.

451,592.—Process of coating metal. Francis J. Clamer, Philadelphia, Pa.

The metallic surfaces are cleansed in suitable cleansing baths, immersed in a bath of muriatic acid, then in a bath of saturated solution of tin, zinc and muriatic acid, and finally coated in a bath composed of lead, sal-ammonia, arsenic, and phosphate of lead.

451,612.—Method of utilizing products of combustion. Emil Biedermann and E. W. Harvey, Westminster, Eng.

451,642.—Process of purifying suint. Israel Roos, Frankfort-on-the-Main, Germany.

The wool fat is first treated with hot water, then with alkaline solution, the mixture is boiled, allowed to cool and settle, the non-saponifiable matter is separated, then treated with dilute acid, and finally washed with water.

451,660.—Process of refining hydro-carbons. Edward D. Kendall, Brooklyn, N. Y.

Mineral hydrocarbon oils containing sulphur are mixed with mercuric chloride in solution, and the absorbed mercuric compound is finally removed by means of a suitable sulphide.

451,679.—Apparatus for manufacturing alcohol from sugar cane. Gaston Descamp, Havana, Cuba.

451,706.—Yeast cake. James W. Cameron, New York, N. Y.

A yeast cake enclosed in a shell of flour paste and chalk (soapstone).

453,724.—Process of purifying petroleum distillates. Thomas J. Gordon, Lima, Ohio.

451,799.—Process of ornamenting artificial stone. William Bleiss, Kansas City, Mo.

451,847.—Artificial musk. Albert Baur, Gispersleben, Germany.

A trinitrated hydrocarbon derived from toluene or its homologues in solid crystalline form characterized by the odor of natural musk.

Issued May 12th, 1891.

451,926.—Concentrating apparatus. Ryerson D. Gates, Chicago, Ill.

451,948.—Galvanic battery. G. C. McCullough, Richmond, Ind.

452,030.—Process of manufacturing sodium and potassium. Hamilton Y. Castner, London, Eng.

452,062.—Apparatus for the manufacture of sugar. Louis E. A. Prangey, Paris, France.

452,063.—Manufacture of refined sugar. Louis E. A. Prangey, Paris, France.

452,072.—Apparatus for bleaching paper pulp. Joseph Jordan, Bridgeport, Pa.

452,125.—Apparatus for extracting metals from their ores. Werner von Siemens, Berlin, Germany.

452,149.—Device for fermenting beer. Jacob F. Theurer, Milwaukee, Wis.

452,197.—Orange yellow dye. Jacob Schmid, Basle, Switzerland.

An orange yellow dye stuff derived from salicylic acid and resorcin, which appears in the form of an orange brown paste, or when dry as an orange brown powder, easily soluble in water and alcohol, and insoluble in benzine.

452,210.—Process of dyeing with gallacetophenone. René Bohn, Ludwigshafen-on-the Rhine, Germany.

452,246.—Apparatus for the manufacture of hydrogen gas. James W. Tallmadge, Albany, N. Y.

452,263.—Process for making white lead. Ellert W. Dahl, New York, N. Y.

452,273.—Ammonia absorber. Frederick Kaiser, Knoxville, Tenn.

452,324.—Process of dyeing aniline black. Heinrich Thies, Barmen, Germany.

Vegetable fibres, etc., are exposed to the action of aniline oil in the presence of hydrochloric acid, an alkaline salt, and hydrofluoric acid.

Issued May 19, 1891.

452,378.—Process of making ammonium sulphite. Prosper de Lachomette, Lyons, France.

Dry ammonia and sulphurous gas are conducted in suitable proportions into a saturating tank.

452,386.—Process of making lead sulphate. Heaton Pennington, Chicago, Ill.

Lead acetate is first prepared from metallic lead and then treated directly with a suitable quantity of sulphuric acid.

452,405.—Apparatus for preparing infusions of coffee. George R. Wilson, Finsbury, Eng.

452,407.—Process of making hard potash soap. Johann N. Zeitler Carmstadt, Germany.

452,439.—Production of reclaimed rubber. Rudolph A. Loewenthal, New York, N. Y.

452,454.—Process of extracting sugar from molasses. Marie F. E. E. Marondeau, Paris, France.

452,479.—Method of manufacturing articles of combined hard rubber and metal. Frank Lambert, Brooklyn, N. Y.

452,507.—Apparatus for concentrating solutions. John Patten, New York, N. Y.

452,512.—Apparatus for impregnating liquids with gas. Ulrich Bachman, San Francisco, Cal.

452,535.—Condenser-coil for ice-making machines. Ehrgott T. Winkler, Philadelphia, Pa.

452,536.—Ice-making and refrigerating machine. Ehrgott T. Winkler, Philadelphia, Pa.

452,537.—Compression pump for ice-making machines. Ehrgott T. Winkler, Philadelphia, Pa.

452,538.—Combined rain-water cut-off and filter. William W. Bays, Knoxville, Tenn.

452,578.—Process for refining crude petroleum. Charles C. Mengel, Sr., Bay City, Mich.

452,676.—Ore-concentrator. Fred. Manuel and Kenneth M. Reeves, Helena, Mont.

452,697.—Process and apparatus for the manufacture of gas. Walter P. Elliott, New York, N. Y.

452,783.—Process of manufacturing mineral wool. Charles H. Rockwell, Cleveland, Ohio.

452,760.—Composition of matter for insulating purposes. Frederick Salathe, Jersey City, N. J.

A compound of some hydrocarbon product, sulphur and india rubber, gutta-percha, or oxidized linseed oil.

452,764.—Hydrocarbon product. Frederick Salathe, Jersey City, N. J.

A solid material of the $C_{10}H_{16}$ series, having sp. gr. 1.028, tough and of a glossy, jet black color, flexible and somewhat plastic at ordinary temperatures, soluble in naphtha and turpentine, capable of withstanding a temperature of 600° F., and resisting acids and alkalies, excepting concentrated nitric and concentrated sulphuric acids.

Issued May, 26, 1891.

452,794.—Melting furnace, William W. Keys, Bridgeport, Conn.

452,800.—Method of soldering aluminium. Frank J. Page and Harry A. Anderson, Waterbury, Conn.

The surfaces to be joined are fluxed with silver chloride and solder is then introduced upon the surfaces.

452,821.—Manufacturing of phosphorus. Herbert H. Wing, Buffalo, N. Y.

A mixture of a phosphate and a silicate is calcined in a reducing flame, whereby the phosphoric anhydride is expelled and reduced. The fumes are conducted through a depositing chamber, which is kept at a temperature of about 500° F., in which the red phosphorus is deposited. The remaining fumes are passed through water chambers wherein the yellow phosphorus is condensed.

452,869.—Artificial ivory. George W. Tooker, New York, N. Y.

Made from albumen, bone-ash powder talc, and fibrous material.

452,967.—Process of refining linseed oil. Thomas H. Grey, Bermondsey, Eng.

The oil is first treated with a solution of caustic alkali of a strength of about 30°. Common salt is finally added, the whole thoroughly mixed, allowed to settle and the clear oil decanted.

453,005.—Apparatus for producing anhydrous ammonia. Daniel L. Holden, New York, N. Y.

453,035.—Guaiacol ether. Joseph Bougartz, Aachin, Höchst-on-the-Main, Germany.

453,105.—Water purifier. Eugene Britney, Indianapolis, Ind.

453,115.—Mineral wool. Charles H. Hubbell, St. Louis, Mo.

453,187.—Process of making basic persulphate of iron. Joseph Van Ruymbeke, Chicago, Ill.

Sulphuric acid and oxide of iron are mixed and heated to a temperature of 380 to 500° F., until the water has been expelled and a persulphate of requisite basicity produced.

453,140.—Apparatus for the manufacture of carbon black. Edwin Binney, New York, N. Y.

J. • F. G.