

American Patents.

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PATENT OFFICE, BY O. H. KRAUSE.

January 1, 1884.

291,142.—Base for paints.—A. E. Brockett.

Made of pine tar or Stockholm tar, caoutchouc gum, gutta percha, gum shellac, gum copal or copal (oil) varnish, and linseed oil.

291,163.—Manufacture of ferrocyanides.—G. de Vigne.

Coal gas, or other gas or smoke, containing cyanogen or hydrocyanic acid is deprived of its tarry products and subjected to the action of a mixture of iron, in any of its various forms, and an alkaline salt.

291,167.—Process of purifying water for boiler use.—C. B. Dudley.

Consists in treating the water with caustic baryta, in addition to soda lime, the whole process being in one operation.

291,168.—Method of purifying water for boiler use.—C. B. Dudley.

Consists in treating the water, first with caustic baryta, and then with carbonate of soda, the whole process being in one operation.

291,175.—Extracting naphtha from oil.—I. W. Evans.

Heats the oil to the desired temperature, then admits live steam to drive off the naphtha in the form of vapor.

291,264.—Process of obtaining ammonia from furnace gases.—J. and J. Addie.

Consists in first fixing the ammonia in such gases after they leave the furnace by mixing them with sulphurous acid or sulphuric acid, in the form of gas or vapor, and then condensing or dissolving the salts or compounds thereby formed.

291,298.—Retort deoxidizing furnace.—I. D. Condit, Jr.

Not intelligible without the drawing.

291,302.—Preparation of glue stock from bones, etc.—E. F. Crusé.

Adds calcium carbonate to the mother-liquid resulting from the treatment of bones, etc., with hydrochloric acid in the manufacture of glue, then adds calcium hydrate to precipitate organic matter and separates the clear calcium chloride from the precipitated impurities. The calcium chloride is then decomposed by means of sulphuric acid and the resulting hydrochloric acid used over again after the calcium sulphate has been filtered off.

291,329.—Manufacture of Soap.—W. E. Gibbs and C. G. Otis.

The mixture of alkali and fat is passed forcibly through a heated channel filled with small particles of iron or other substance.

291,386.—Gas furnace for metallurgic and other purposes, and method of operating the same.—J. F. Morgan and H. F. Hayden.

The method for controlling and varying the character of the flame in metallurgic and like furnaces, which consists in first bringing together the proper volumes of air and gas to produce complete combustion at the point of initial combustion, and then surcharging the flame with oxidizing or carburizing gases between the point of initial combustion and the working chamber of the furnace.

291,410.—Blast furnace for zinc ores.—A. M. G. Sébillot.

A blast furnace combined with an upper and lower outlet-pipe, of which the former is connected with a condensing chamber, and the latter is connected with a condenser formed of pipes and a metal collecting chamber, which pipe condenser is connected with a condensing chamber.

291,417.—Process and apparatus for making coal gas.—A. Stamm.

The tarry vapors given off from fresh charges of bituminous coal in gas retorts, during the early part of the distillation, are converted into a fixed gas, by injecting such vapors by the combined action of a jet of gas under pressure, and a small jet of steam, into and through a mass of incandescent coke contained in a separate retort.

291,421.—Process of and apparatus for manufacturing gas.—J. L. Stewart.

Consists in generating a mixture of hydrogen and carbonic oxide, by decomposing steam in contact with incandescent fuel, cooling them and then forcing them by a pump into an injecting device, and thereby spraying a stream of hydrocarbon liquid into a heated vaporiser, and finally combining and fixing the resulting vapor and gases by passing them through heated retorts.

291,422.—Coke oven.—H. Stier.

A coke oven adapted for heating with gas, and arranged on the regenerative principle.

291,462.—Fume condensing attachment for ore furnaces.—E. M. Alderman.

The smoke stack of an ore furnace or smelter is connected with a large horizontal pipe, into which water can be sprayed for the purpose of condensing the fumes.

291,463.—Electric gas generator. C. E. Ball and C. S. Bradford, Jr.

Consists in generating hydrocarbon gas in an electrical generator, and hydrogen gas in another electrical generator and mingling said gases.

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291,565.—Process of making syrup and sugar from sorghum cane. A. J. Adamson.

Proposes to first roast the cane and then to express the juice.

291,641.—Process of obtaining aluminium. F. J. Seymour.

Claims to obtain an alloy of zinc and aluminium by mixing aluminous ore or earth with an ore of zinc and with carbonaceous material and a flux and subjecting the mixture to heat in a close retort.

291,632.—Method of and apparatus for refrigerating paraffine and other oils. B. F. Shakespeare.

Consists in bringing together the oil and a refrigerating liquid both in a spray or comminuted condition.

291,670.—Process of and apparatus for obtaining gold and silver from their ores by combined electrolytic and amalgamating processes. M. Body.

Subjects gold and silver ores to the action of ferric salts, in combination with the electrolytic process and subsequently amalgamates the metals with mercury under the continued action of the electric current.

291,676.—Apparatus for carburizing air. W. F. Burrows.

A combination of mechanical arrangements for effecting the above purpose.

291,677.—Paint. A. Buzolich and T. K. Smith.

Composed of the following harmonious ingredients: Linseed or nut oil, hydrochloric acid, phosphoric acid, shellac, resin, chromate of potash, beeswax and garlic.

291,678.—Paint. A. Buzolich.

A paint composition, the basis whereof is linseed, or nut oil, combined with chrysophanic acid, sulphates of zinc and copper, and chromate of potash.

291,734.—Artificial stone. W. Howell.

Muriatic acid, flowers of sulphur, molasses, iron scale, sand and cement.

291,784.—Tawing hides and skins. A. Schultz.

Consists in subjecting them to the action of a solution of potassium bichromate and then treating the same with a compound containing hydro-sulphurous acid.

291,785.—Tawing hides and skins.—A. Schultz.

Consists in subjecting them to the action of a bath prepared from a metallic salt—such as potassium bichromate—and then to the action of a bath capable of evolving sulphurous acid.

291,821.—Process of concentrating sulphuric acid.—M. A. Walsh.

Concentrates in the usual way until the acid contains about 93% of monohydrated acid, and then completes the concentration in iron or steel vessels.

291,830.—Hydrocarbon furnace.—R. B. Avery.

Fed by hydrocarbon vapors and gas evolved from the oil by means of superheated steam

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291,860.—Apparatus for the manufacture and delivery of illuminating gas.—W. H. Adams.

Manufactures carbonic oxide with or without the addition of steam and hydrocarbons, by forcing a controllable supply of air to the producers and thence to the service mains.

291,948.—Gas generator.—D. M. Small.

Apparatus for enriching air or combustible gases with hydrocarbons.

291,953.—Depilating hides and skins.—A. H. Stone.

Sulphide of sodium in combination with pure sulphur and carbon.

291,993.—Apparatus for recovering soda used in manufacture of paper pulp.—E. W. Dixon.

Relates to an apparatus for concentrating dilute solutions.

292,020 and **292,021.**—Mode of utilizing discarded rubber belting and rubber hose.—F. A. Magowan.

292,054.—Apparatus for making sulphuric acid.—J. S. Rigby.

The combination of the kiln or burner, the nitre oven, its pans, a sulphuric acid heating cistern, a vessel provided with an indicator and serving to contain nitrate of soda in solution and pipes for supplying the solution and sulphuric acid to the pans.

292,078.—Glover's tower. M. A. Walsh.

Claim 3. A Glover's tower, the walls and arch of which are composed of courses of cut quartz, said arch being corbeled out by overhanging arches, and formed with openings for the descent of acid from an upper chamber and the ascent of gases admitted through a lateral opening near the base of the tower, substantially as shown and described.

292,081 and 292,082.—Apparatus for making gas.—A. Wilson.

A gas producer with central rotating tuyere, liquid seal and provided with means for automatically removing incombustible refuse.

292,100.—Process of and apparatus for mixing and cooling sugar.—M. C. Cogswell.

A combination of mechanical arrangements for finely dividing the sugar and bringing it into contact with air.

292,119.—Process of making white lead.—I. K. Kessler.

Electrolyses an alkaline acetate in solution, using lead for both the anode and cathode, whereby acetate of lead and solution of caustic alkali is formed. These are subsequently mixed, forming hydrated oxide of lead and regenerating the alkaline acetate. By passing carbonic acid gas into this solution, the suspended oxide is converted into carbonate.

292,125.—Manufacture of vinegar.—V. Michaelis.

Describes a method for conducting the ordinary process of acetification with greater rapidity.