# Abstracts of American Patents Relating to Chemistry.

(From the Official Bulletin of the U.S. Patent Office.)

June 21st. 1887.

365,120.—Centrifugal apparatus for testing milk. G. de Laval.

365,294,—Apparatus for manufacturing gas. B. Brazelle.

365,318.—Process of and apparatus for treating barium sulphate. W. M. Page and E. B. Krausse.

June 28th, 1887.

365,409.—Production of new coloring matter. J. Rohner.

Produced by the action of metaphenylenediamine and metatoluelenediamine upon amidoazobenzene, or amidoazotoluol, or amidoazoxylol, or amidoazoanisol.

365,551,-Ink eraser. R. M. Swinburne.

Consists of a fibrous body charged with citric acid.

365,565.—Filter press. W. Baur.

365,616.—Machine for manufacturing and bleaching sugar. J. A. Lombas.

365.655. - Manufacture of lactic acid. C. N. Waite.

The acid is made by fermenting a fermentable sugar in the presence of glue, a neutralizer and lactic ferment.

**365,666.**—Manufacture of new red dyestuffs or coloring matters. P. Boettiger.

Salts of tetrazo-diphenyl are combined with alpha or beta naphthylamines, and the dyestuffs thus formed are converted into mono- or disulphoacids, by treating with concentrated sulphuric acid, anhydrous sulphuric acid, ormonochlorhydrine.

365,667.—Combination of the salts of tetrazo-diphenyl and the naphthylamines. P. Boettiger.

July 5th, 1887,

365,906.—Apparatus for the manufacture of fuel and illuminating gas. J. Bujac.

365,921.—Process of refining and clarifying crude cottonseed oil. R. Hunt and E. S. Wilson.

The oil is treated with sodium silicate or its equivalent, and then with calcium hypochlorite and an acid.

366,012.—Composition for artificial stone, etc. J. Lorenz.

Consists of five parts ashes, four parts cinders and one part cement.

366.026.—Apparatus for the manufacture of salt. R. G. Peters.

366,036.—Process of making potassium bichromate. W. Simon.

Sodium bichromate is decomposed by potassium sulphate, or sodium chromate is decomposed by potassium sulphate and sulphuric acid.

366,078.—Manufacture of dyestuffs or coloring matters. C. Duisberg.

Obtained by the action of tetrazo-ditolyl upon alphanaphthol-alpha monosulpho acid.

366,081.—Obtaining hydrogen from water gas. H. H. Edgerton.

The hydrogen is separated by passing the gas through porous material, such as unglazed porcelain.

**366,103.**—Process of extracting silver from its ores by lixiviation. O. Hofniann.

366,118.—Process of recovering tin from tin plate and other materials. A. Lambotte.

The tin scraps are subjected to the action of a continuous current of chlorine diluted with air at a temperature above the boiling point of stannous chloride, the resulting stannous chloride being collected in a solution of stannous chloride.

### July 12th, 1887.

**366,231.**—Plastic composition. J. A. McClelland. Consists of pyroxyline dissolved in a non-volatile gum or resin.

366,281.—Explosive compound. C. W. Volney.

Consists of a solution of nitro-starch in nitro-glycerin.

**866,856.**—Blue coloring matter formed by the action of paranitroso-diphenylamines upon phenols or oxycarbonic acids. E. Ullrich.

**866,357.**—Blue coloring matter formed from paranitroso-methyldiphenylamine on phenols or oxycarbonic acids.

366,487.—Process of and apparatus for distilling petroleum. J. M. Krieser.

366.639,-Production of dimethyldiethylthionin blue. E. Ullrich.

Is produced by joint oxidation of paramidodimethylaniline and diethylaniline in presence of a hyposulphite, or of paramido-diethylaniline and dimethylaniline in presence of a hyposulphite.

366,640.—Production of diethylmethylthionin blue. E. Ullrich.

Is produced by joint oxidation of paramidodiethylaniline and monomethylaniline in presence of a hyposulphite.

366.168.—Gas generating machine. L. C. Huber.

366.169.—Injector for aeration of water. J. W. Hyatt.

**866,170.**—Apparatus for purifying the water in steam boilers. J. W. Hyatt.

**866.171.**—Apparatus for purifying water. J. W. Hyatt.

#### Issued July 19th, 1887.

**866,720.**—Apparatus for refining illuminating and lubricating oils. H. Goldwater.

866,885.—Process of making ethers from petroleum. E. Schaal.

## July 26th, 1887.

867,145,—Process of tanning. C. Kaestner.

The leather is first dressed with alum and thoroughly dried, after which it is treated with tannin dissolved in alcohol.

867,158,-Metallic alloy. C. A. Paillard.

Consists of 60-75 parts palladium, 15-25 parts copper and 1-5 parts iron.

867,159,-Alloy. C. A. Paillard.

Consists of 50-75 parts palladium, 20-30 parts copper and 5-20 parts iron.

867,160,—Alloy, C. A. Paillard.

Consists of 65-75 parts palladium, 15-25 parts copper, 1-5 parts nickel, 1-2½ parts gold, ½ to 2 parts platinum, 3-10 parts silver and 1-5 parts steel.

**867,161.**—Alloy. C. A. Paillard.

Consists of 45-50 parts palladium, 20-25 parts silver, 15-25 parts copper, 2-5 parts gold, 2-5 parts platinum, 2-5 parts nickel and 2-5 parts steel.

## August 2d, 1887.

**867,426.**—Apparatus for the manufacture of ammonium sulphate. C. Meyer, Jr.

867,619.—Apparatus for manufacturing illuminating and heating gas. J. Hanlon.

867,620.—Apparatus for manufacturing illuminating and heating gas. J. Hanlon.

867.669,—Apparatus for distilling wood. A. F. Schmitt.

867.781.—Deposition of platinum by electricity. W. A. Thoms.

The solution contains platinum, sodium phosphate, ammonium phosphate and sodium chloride.

867,782,—Fertilizer. J. Van Ruymbeke.

Consists of the undecomposed coagulated albuminoids of concentrated tank waters.

August 9th, 1887.

367,940.—Process of puritying and preserving butter. G. W. Towar, Jr. The butter is heated and all extraneous matter removed. The pure liquid is then solidified by refrigeration and mixed with glycerine and salt, after which it is remelted until the glycerine and salt are eliminated. Finally the melted butter is mixed with fresh milk and agitated with it.

367,992.—Process of preparing anhydrous ammonia. P. J. McMahon.

367,993.—Apparatus for recovering ammonia in ammonia motors, etc. P. J. McMahon.

368.032,—Process of lactic ferminatation, C. N. Waite.

Glucose, sugar or starch are fermented by the addition of ammonium hydroxide, phosphoric acid and lactic ferment in closed vessels, with exclusion of air.

368,054.—Manufacture of soluble naphtharizin. R. Bohn.

368.071,—Process of and apparatus for treating sewage. L. Coes.

368,123.—Manufacture of carbonic acid. C. Arnois.

Water gas is passed through a heated mass of a metallic oxidizing agent and thereby converted into carbon dioxide and steam. The steam is condensed and the carbon dioxide collected.

368,174.—Composition for cementing rubber. H. Vogley.

Consists of gum rubber, gum gamboge, white lead, benzine, sulphur and sulphuric ether.

August 16th, 1887.

368.494.—Manufacture of resin acid ethers. E. Schaal.

August 23d, 1887.

**368,716.**—Process for the production of blue coloring matter. E. Greppin.

Is produced by the oxidation of a mixture of paramido-dimethylaniline or the derivatives of diethylaniline, dimethylaniline, dimethylaniline, toluidine, methyl-ethylorthotoluidine, and paraphenylendiamine or paratoluylendiamine (paradiamidotoluol), in the presence of hydrogen sulphide in acid solution.

368.881.-Manufacture of salt. J. H. Duncan.

368,882,—Apparatus for the manufacture of illuminating gas. F. Egner.

W. R.