

Reports on American and Foreign Patents Relating to Chemistry.

American Patents.

Condensed from the Official Gazette of the U. S. Patent Office, by ARNO BEHR.

Aug. 3, 1880.

330,646.—*Closing drums containing caustic soda.* FREDERICK H. MORT.

The cover of the drum is provided with internal projections, which are held firmly by the solidified soda, and thus secure the cover to the drum.

230,753.—*Fabrication of onyx from agate.* CARL P. CULLMANN and CARL A. LORENZ.

Immersing one side in a bath of dilute nitric acid and iron, the other side in a bath of carbonate of potassa and water, then drying the stones on a stove and then burning them.

230,841.—*Tanning compound.* SIMON ULLMO.

For 100 lbs. of skins, 30 lbs. divi-divi, 30 lbs. garouille or oak-bark, 30 lbs. alum, 14 lbs. sour barley-flour, 1 lb. sulphate of copper.

Aug. 10, 1880.

230,872.—*Solution for nickel plating.* HARRY L. HAAS.

Formate of nickel with excess of acid.

230,874.—*Pulverulent preparation of phosphoric acid.* EBEN N. HORSFORD.

The solution of phosphoric acid and monocalcic phosphate, resulting from the action of sulphuric acid on bone-ash is, after concentration, mixed with starch, thoroughly dried and pulverized. This preparation, mixed with a dry alkaline carbonate, can be used as a baking powder.

230,878.—*Insulating compound.* ADOLPHUS A. KNUDSON and FREDERICK L. KANE.

Asphaltum mixed with paraffine oil, petroleum residuum or candle tar.

230,898.—*Paint oil from petroleum acid residuus.* ANDREW G. SHADE and GEORGE H. MOORE.

230,903.—*Incrustation preventive.* JOHN B. SOWASH and GARDNER V. WRIGHT.

Chloride of ammonium, sweet oil, lard oil, Virginia black oil or residuum of petroleum and sugar.

230,912.—*Roofing compound.* PHILEMON WRIGHT.

A mixture of the "flyings" of ground calcined gypsum and coal tar.

230,919.—*Compound for water proofing and preserving building materials.* ROBERT M. CAFFALL.

Consists of creosote, 1 lb.; turpentine, 5 lbs., and paraffine, 25 lbs.

230,965.—*Enameling compound.* GEO. RUSSELL.

Consists of asphaltum, naphtha, shellac, protoxide of lead and boiled linseed oil.

230,991.—*Process of obtaining the glutinous and starchy substances from Indian corn.* LEWIS T. BENNETT.

Consists in a mechanical separation of the hulls and germs from the starchy portions of the corn.

231,035.—*Tannin extract.* PAUL GONDOLO.

The material containing tannin is extracted with slightly acidulated water, the free acid neutralized by an alkali, and the extract then clarified by the addition of blood and the application of heat.

231,064.—*Electro-deposition of aluminum and gold alloy.* GEORGE LINSENMAYER.

231,106.—*Preparing moss for upholstery.* CHARLES M. SARTWELL.

Treating the moss with lime-water.

Aug. 17, 1880.

231,328.—*Process of rectifying spirits.* CASPER KALTHOFF.

Before redistillation a small quantity of nitrate of silver is dissolved in the crude alcohol.

231,335.—*Filter.* JOHANN KROOG.

A new filter press.

Aug. 24, 1880.

231,419.—*Process for preserving wood.* JONAS D. FRANCK.

The process consists in saturating the wood with a mixture of lime-water and urine in a heated state.

231,484.—*Process for the conversion of marine plants into pulp.* EDOUARD V. T. L. GORGES.

The plants are macerated in caustic lye, after draining plunged into dilute sulphuric acid, and the resulting pulp finally washed in an alkaline bath.

231,489.—*Obtaining tannic acid.* JULIUS HOLTZ.

Brief: The acid is obtained in acidular form, at a low temperature, by forcing the evaporated extract through a perforated floor into a heated chamber, in which a partial vacuum is formed.

231,532.—*Process of uniting wrought and cast iron.* MORGAN BURNS.

That part of the wrought iron object around which the fluid iron is to be cast, is coated with a mixture of kerosene oil and chalk.

231,540.—*Lining gas generators, acid chambers and fountains for mineral waters.* JOHN COLLINS.

The coating to be applied consists of a mixture of asphaltum, benzine and plumbago.

231,563.—*Manufacture of iron.* ROBERT H. HAMILTON and WILLIAM GRIFFITH.

In the puddling process there is mixed into the molten metal a certain proportion of borax or of a mixture of borax with black oxide of manganese, sal-soda or common salt, and nitrate of soda.

231,583.—*Insulating Compound.* WILLIAM W. JAQUES.

Rubber, beeswax and Venice turpentine.

August 31, 1880.

Composition for flavoring cigars. HENRY K. REISS.

New England rum, alcohol, oil of apple, tonka beans, valerian root and laudanum.

231,737.—*Lactometer.* GEORGE TANNER.

A number of tubes and scale, combined on a stand so that the amount of cream separated can be easily measured.

231,804.—*Process of economically obtaining starch and glucose from corn.* HENRY C. HUMPHREY.

Proposes to use the residue from the manufacture of starch for the production of glucose.

231,807.—*Process of preserving meat in the carcass.* RICHARD JONES.

Consists in introducing the preservative solution into the circulatory organs of the animal, after insensibility has been produced, and before the heart has ceased to beat.

231,841.—*Acid siphon pump.* ELLEN AUGUSTA NICHOLS, WOLCOTT B. MANWARING and OLIN L. LIVESEY.

231,858.—*Process for the manufacture of cement.* ERNEST SOLVAY.

By calcining together chloride of calcium and clay, a soft silico-aluminate of lime is produced. This is intimately mixed with lime, and then constitutes the cement.

231,860.—*Manufacture of chloride of lime.* ERNEST SOLVAY.

Hydrate of lime is formed into small fragments of agglomerated morsels, by which the complete absorption of the chlorine is effected.

Sept. 7, 1880.

231,909.—*Incrustation preventive.* FULTON HENDERSON.

A mixture of 8 lbs. of coal tar, 8 ounces of red lead and 1 ounce of linseed oil.

232,051.—*Method of purifying rancid butter.* JAMES CHESTON MORRIS.

Uses a solution of boracic acid.

232,071.—*Process of treating spirituous liquors.* ADDISON M. SAWYER.

For the purpose of aging such liquors, air is forced through them which is "charged with the fumes of quick-lime."

Sept. 14, 1880.

232,110.—*Preparation of magnesia and the manufacture of refractory bricks therefrom.* ALFRED BRACONNIER.

Calcined dolomite is treated with a solution of chloride of ammonium, which dissolves the lime.

Sept. 21, 1880.

232,381.—*Explosive compound.* MAX TSCHIRNER.

A mixture of picric acid and chlorate of potassium.

Sept. 28, 1880.

232,615.—*Solution for nickel plating.* CHARLES G. PENDLETON.

A solution of acetate of nickel containing an excess of acetic acid.

232,685.—*Recovering sulphuric acid from sludge acid.* EDWARD CLARK.

232,755.—*Solution for the electro-deposition of nickel.* JOSEPH H. POTTS.

A solution of the acetates of nickel and of lime containing free acetic acid.

Foreign Patents.

Condensed from R. BIEDERMANN'S Report to the German Chemical Society,
by OTTO H. KRAUSE.

F. PECHINEY, Salindres: *Recovery of sulphur from alkali waste.* (Engl. P., No. 3194, August 8, 1879).—The yellow liquors from alkali waste are oxidized by passing a current of air through them, as has often been done before. The inventor proposes, however, to interrupt the injection of air when all the calcium monosulphide has been oxidized and before calcium sulphite has been formed. Calcium thiosulphate and polysulphide are obtained from which, upon the addition of acids, all the sulphur is precipitated and not partly evolved in the form of sulphurous acid, as is the case with lyes which have been completely oxidized.

S. G. THOMAS: *Manufacture of phosphates from slag.* (Engl. P., No. 3196, August 9, 1879).—The slag resulting from Thomas' process of dephosphorizing iron contains 15—20 per cent. of phosphoric acid. It is pulverized and treated with hydrochloric acid. The filtered solution is oxidized with chlorine or manganese peroxide to obtain ferric phosphate, which is then precipitated from a boiling solution by lime or dolomite. The precipitated ferric phosphate is heated with sodic sulphate and coal. Air is admitted toward the end of the operation in