

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.

Nov. 9, 1880.

234,129.—*Production of sulphur, copper-matte, etc., from pyrites.* JOHN HOLLWAY.

A blast of air is forced through the molten mass, the heat developed herein is utilized in melting down a subsequent charge of ore, after which the volatile products are conducted into a collecting chamber, where the sulphur and the condensable sulphides or oxides are deposited.

234,142-144.—*Process of and apparatus for preparing wool for making paper pulp.* WM. R. PATRICK.

This is essentially an alternate treatment of the wool with water and steam under pressure.

234,145.—*Manufacture of bichromates.* HENRY PEMBERTON.

Carbonic acid gas is passed into the calcined mixture.

234,168 and 234,169.—*Pyrometer.* EDWARD BROWN.

234,190.—*Method of generating artificial heat.* BENJAMIN N. HUESTIS.

Claims "burning petroleum in connection with a bed of calcium (sic) or of common lump lime saturated with the oil."

Nov. 16, 1880.

234,400.—*Process of and apparatus for manufacturing illuminating gas.* ARTHUR O. GRANGER and JOSEPH H. COLLINS, JR.

Refers to the production of water gas, which is afterwards carburetted, the carburetting fluid hydrocarbon being transformed into a fixed gas.

234,413.—*Galvanic battery.* GEORGE L. LECLANCHE.

234,425.—*Roofing composition.* CHRISTOPHER F. PEARSON.

Yellow ochre, whiting, litharge, india-rubber and linseed oil.

234,428.—*Compressed malt.* ROBERT PRENDERGAST and ROBERT FREE.

The malt is crushed and then compressed to form coherent blocks.

234,442.—*Roofing and paving material.* CYRUS M. WARREN.

234,482.—*Alloy for coating metals.* JOHN B. JONES.

An alloy of nickel, lead, tin and zinc.

234,489.—*Explosive compound.* CHARLES A. MORSE.

The solutions of nitroglycerine and resin in some volatile solvent are mixed, and the solvent removed by evaporation.

234,494.—*Preparations melting under 32° F.; apparatus therefor, and their application.* STANISLAS H. ROUART.

“Solid ice enclosing particles of salt.”

234,510 and 234,511.—*Treatment and preparation of saccharine substances.* MORIZ WEINRICH.

Refers to the preparation and purification, by washing with alcohol, of a saccharate of lime from molasses.

234,524.—*Coating iron with oxide.* GEORGE and ANTHONY S. BOWER.

The iron is treated at a high temperature with carbonic acid.

234,567.—*Compound for preserving animal and vegetable substances.* JULIUS HAUFF.

A dry preserving compound, consisting of borax and boracic acid.

234,595.—*Manufacture of ferric oxide and cupric chloride.* JUAN F. N. MACAY.

In the presence of air, cupric oxichloride and a solution of ferrous chloride react upon each other, and produce the substances referred to in the Patent.

Nov. 23, 1880.

234,675.—*Composition for coating surfaces.* CHARLES M. JACOB.

A varnish consisting of collodion, creosote, boiled linseed oil, black oxide of manganese and rosin.

234,680.—*Liquid starch polish compound.* SANTIAGO LIMA.

Water, borax, tallow, cotton-seed oil, gelatine and castor oil.

234,704.—*Manufacture of white aluminous cake.* GEORGE F. BIHN.

The product of the reaction of sulphuric acid on a mixture of halloysite and bauxite, is treated in a semi-fused state with alkaline sulphites or bisulphites.

234,737.—*Fire-proof compound for furnace-linings, converter-bottoms, tuyeres, etc.* ERNST F. ALTHAUS, OTTO JUNGHAUS and HERMANN UELSMANN.

A mixture of dolomitic lime and caustic alkali, or alkaline carbonates.

234,782.—*Fertilizer.* BENJAMIN JOHNSON and WOOSTER P. GIDDINGS.

Ground unburned oyster shell, potash and soda.

234,789.—*Manufacture of iron and steel.* ALFRED KRUPP.

A charge of molten iron is allowed to remain on the hearth in contact with oxide of iron until phosphorus, sulphur and silicon have been taken up by the oxide, and when the carbon begins to burn is with drawn into a second furnace for subsequent treatment, for the production of steel or puddled iron.

234,815.—*Process of extracting malt.* JOHN A. SCHAEFER.

234,838.—*Artificial stone.* GEORGE W. MASON.

Nov. 30, 1880.

234,844.—*Compound for curing and preserving meats.* WILLIAM ARCH-DEACON.

Salt, pyroigneous acid and salicylic acid.

234,884.—*Apparatus for and process of separating gold, silver and copper from lead.* ARTHUR H. MEYER.

234,904.—*Apparatus for mixing aeriform fluids.* JOHN F. BARKER.

234,998.—*Apparatus for purification of the products resulting from distillation of wood.* JEAN A. MATHIEU.

235,014.—*Preparation of clay for manufacture of pottery.* SIMEON G. PHILLIPS.

The clay is soaked in a thin solution of alum.

235,053.—*Manufacture of starch.* THEODORE GASSAWAY.

Refers to the manufacture of starch from wheat, without fermentation.

235,057.—*Process of refining paraffine wax.* WILLIAM M. SLOANE and WILLIAM BELL.

It is recrystallized from naphtha, pressed, melted and filtered.

Foreign Patents.

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

R. GRUENEBERG, Alt Damm: *Improvements in the method of preparing potassium sulphate from Stassfurt salts.* (Germ. P., No. 10753, September 13, 1879.)—Schoenite, which is subsequently converted into potassium sulphate, is formed by bringing together potassium chloride and magnesium sulphate, and the resulting liquors used for dissolving natural or artificial carnallite, or kainite. (See preceding Patent.)

H. PRECHT, New Stassfurt: *Method of separating sodium and magnesium chloride from potassium-magnesium sulphate, derived from kainite.* (Germ. P., No. 10637, August 5, 1879.)—Kainite is treated under a steam pressure of 2-5 atmospheres, with water or saline solutions, magnesium sulphate excepted, in quantities of the solvents insufficient for the solution of the sodium chloride.

M. NAHNSEN, Leopoldshall: *Method of working up kainite.* (Germ. P., No. 10772, February 26, 1880.)—Water and hydrochloric acid are driven off by heating to redness. The resulting friable mass, consisting of magnesia and potassium and magnesium sulphate, is treated with a saturated solution of sodium chloride, to remove mechanically the rock salt which remains unaltered during the heating; magnesia is left as a residue upon treatment of the double sulphates with water.