

## Abstracts of American Patents Relating to Chemistry.

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

*Issued January 6, 1891.*

**444,004.**—Salicylate of phenyldimethylpyrazolone. H. Lüttke and L. Scholvién.

Obtained by heating, preferably under pressure, phenylhydrazine, acetyl acetic ether, and methyl salicylic ether in the presence of a halorid hydric acid.

**444,044.**—Welding compound. W. W. Brown and M. C. Reynolds.

Consists of borax, ammonium chloride, potassium ferrocyanide and soapstone.

**444,068.**—Apparatus for making extracts from tan bark. J. Hutchings and W. N. Hutchings.

**444,084.**—Process of enameling photographs and other prints. C. C. F. Brandt.

Consists of celloidine, alcohol and ether.

**444,091.**—Apparatus for the manufacture of gas. L. Stevens.

**444,107.**—Manufacture of sugar. G. Adant.

**444,135.**—Detergent. J. Scharr.

Consists of water, sodium carbonate, potassium carbonate, soap bark, crude turpentine, gum arabic, ammonium chloride, crude petroleum, olein, olive oil, phenol, salicylic acid and camphor.

**444,152.**—Apparatus for treating whiskey. F. Madlener.

**444,187.**—Cleaning composition. D. E. Sumner.

Consists of beef gall, cactus root, soap, sal soda, borax, oil of sassafras and water.

**444,202.**—Process of distilling oil. A. Mason.

**444,203.**—Apparatus for distilling oil. A. Mason.

**444,229.**—Compound for coloring broom corn. R. M. Donovan.

Consists of green aniline, burnt alum, water and sulphuric acid.

**444,300.**—Rotary gas scrubber. W. Mooney.

**444,315.**—Apparatus for the manufacture of lamp black. R. Dreyer.

*(Issued January 13, 1891.)*

**444,483.**—Filter, etc. F. Breyer.

**444,538.**—Blue dye. J. Mohler and C. A. Mayer.

Coloring matters obtained by sulpho-conjugating the new products resulting from the action of the primary aromatic amines on the dyes obtained by the action of the nitroso derivatives of the tertiary aromatic amines on the condensation products of tannin with aniline and its homologues, said coloring matters being scarcely soluble in water, soluble in concentrated sulphuric acid with a cherry red color, and forming with the alkalis with a copper red lustre readily soluble in water and alcohol with a greenish blue color, soluble in concentrated sulphuric acid with a cherry red color.

**444,626.**—Lubricating compound. W. Brinck.

Prepared by the action of mineral oils on finely divided caoutchouc at ordinary temperature.

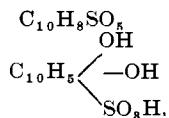
**444,665.**—Anti-fouling paint. N. B. Denny's.

Consists of zinc sulphate, mercuric sulphate, ferric oxide, cupric oxide, zinc slag, zinc, solution of tannin, and shellac varnish.

**444,679.**—Dioxynaphthaline-mono-sulphonic acid. M. Ulrich.

A new dioxynaphthaline-mono-sulphonic acid or its salts produced by melting the salts of alpha-naphthiol, alpha-disulphonic acid S, with caustic alkali in a closed or an open vessel.

It has the following properties; the soda salt crystallizes in small white leaves which are easily soluble in water or alcohol of 60% ; by adding ferric chloride to an aqueous solution a dirty green precipitate, and with some drops of calcium hypochlorite a changeable green solution is formed, the latter being decolorized by an excess; the new acid or its salts give with diazobenzene a new azo-dye stuff, similar in shade to acid magenta, and with ortho-tetrazo-ditoyl or tetrazodiphenyl ethers direct-dyeing coloring matters of bright blue shades. The chemical formula of the acid is:



**444,704.**—Apparatus for distilling wood. A. Koch.

**444,772.**—Apparatus for purifying water. W. Anderson.

**444,775.**—Process of manufacturing artificial ivory. A. de Pont and S. de Pont.

An aqueous solution of phosphoric acid is added to lime, and the resulting phosphate is mixed with finely divided earthy mineral matters, and gelatin and albumin. The mass is then dried and subjected to great pressure while hot.

**444,776.**—Compound for calcimine. G. A. Casselman.

Consists of whitening, marble dust, gypsum rock, borax, zinc sulphate, alum and glue.

*Issued January 20th, 1891.*

**444,833.**—Apparatus for refining oil. B. N. Hawes.

**444,842.**—Paint. N. J. Mitchell.

Consists of coal tar, yellow ochre, plumbago, lime, salt and coal oil.

**444,997.**—Process of treating zinc ores. W. West.

Consists in roasting the ore to form sulphurous acid gas and oxidize the zinc, then cooling this gas to a temperature of 180° F. or below, and passing the same in gaseous form in conjunction with steam and without oxidation into sulphuric acid and through a previously roasted charge to form soluble sulphite of zinc, and then immediately leaching out the zinc sulphite with water at a temperature below 180° F.

**445,053.**—Filter press.—R. Giebermann.

**445,054.**—Apparatus for separating gluten from slaughter house washings. R. Giebermann.

**445,055.**—Process of separating gluten from slaughter house washings. R. Giebermann.

The washings are heated, treated with an aluminium compound and filtered.

**445,091.**—Process of dissolving water glass. P. Sievert.

The lump water glass is placed in a pile in a vessel and a current of steam discharged against it to soften it, while at the same time a spray of alkaline lye is applied.

W. R.