

MEISTER, LUCIUS and BRÜNING, Höchst,  $\frac{8}{m}$ : (Germ. P., No. 3229, April 24th, 1878.)—Preparation of *red, brown and yellow colors* by the action of the disulfo acids of  $\beta$  naphthal on diazo compounds.

For the preparation of the disulfonic acids, 10 kgs. of  $\beta$  naphitol are heated with 30 kgs. of English sulphuric acid, to from 100° to 110° C., for 12 hours.

From the sulfonic acid, thus formed, the sodium compound is prepared and dried. Alcohol, from 80° to 90° Tralles, divides the sodium compounds into a soluble and an insoluble portion. By the reaction of the soluble portion upon diazo-compounds, yellow products are formed, while the insoluble portion forms red substances.

A mixture of 65 kgs. xylydine, 12 kgs. muriatic acid of 20° B, dissolved in 100 kgs. of water, is cooled and then 4.5 kgs. potassium nitrite are added. Thus, diazoxylol chloride is formed, the solution of which is directly introduced into a solution of 20 kgs. disulfonic salt in 200 kgs. water and 10 kgs. ammonia (10 per cent.). The coloring matter is gradually precipitated from this solution.

By the substitution of other amines for xylydine, other dyestuffs may be produced.

H. DREES, Bentheim (Germ. P., No. 3979, May 1st, 1878), produces a *soluble mercury albuminate* for subcutaneous injections, by mixing an alkaline albumen solution with mercuric acetate, and removing the acetate of soda by dialysis. The preparation is easily soluble in alkaline water.

ANTHONY VAN HAGEN, Philadelphia: *Filtering apparatus*. (Germ. P., No. 2771, March 26, 1878.)

C. SCHEIBLER, Berlin: *Method for the extraction of sugar and apparatus for the extraction of substances generally*. (Germ. P., 3573, May 2d, 1878.)

The apparatus is used for the determination of sugar in plants containing sugar.

THEO. SCHLÖSING, Paris: *Separation of vapors from gases or other vapors*. (Eng. P., No. 643, Feb. 13th, 1878.)

GEORGE RAMSDELL, Oswego, N. Y.: *Gas from wood, peat, etc.* (Eng. P. No. 443, Feb. 2d, 1878.)

JOHN COWDERY MARTIN, Richmond, Engl.: (Germ. P., No. 3550, Oct. 11th 1878.)—*Manufacture of white lead*. To improve white lead produced by precipitation, and to give it the same properties which make the white lead prepared by the dry method a superior article, the inventor adds lead suboxide (1 per cent.) to the precipitated article.

A. REGEL, Gotha, prepares *artificial lithographic stones* from Portland cement, sand, quicklime and clay. (Germ. P., No. 3543, May 17th, 1878.)

AUG. SEIBEL, Stettin: *Cement*. (Germ. P., No. 4048, May 10th, 1878.) Equal equivalents of sillicic acid and lime are kneaded together with a solution of calcium or sodium chloride, and the dried mass is heated to redness.

Silica heated with chloride of calcium, and then mixed with quicklime, will likewise produce a cement; also silica, lime and 1 per cent. of sugar.

JOHN EDMUND HÜTTER, Düsseldorf (Germ. P., No. 3867, June 27th, 1878), prepares a new explosive, by mixing under certain precautions finely pulverized gun cotton and barium nitrate.