

Family Dyeing Receipts.

The following receipts and directions are excellent for dyeing on a small scale, and especially adapted for family use. The ingredients required can be obtained at any color store.

303. Black for Worsted or Woolen. Dissolve $\frac{1}{2}$ ounce bichromate of potash in 3 gallons water. Boil the goods in this 40 minutes; then wash in cold water. Then take 3 gallons water, add 9 ounces logwood, 3 ounces fustic, and one or two drops, D. O. V., or Double Oil of Vitriol; boil the goods 40 minutes, and wash out in cold water. This will dye from 1 to 2 pounds of cloth, or a lady's dress, if of a dark color, as brown, claret, &c.

All colored dresses with cotton warps should be previously steeped 1 hour in sumach liquor; and then soaked for 30 minutes in 3 gallons of clean water, with 1 cupful of nitrate of iron (*see No. 116*); then it must be well washed, and dyed as first stated.

304. Black for Silk. Dye the same as black for worsted; but previously steep the silk in the following liquor: scald 4 ounces logwood, and $\frac{1}{4}$ ounce turmeric in 1 pint boiling water; then add 7 pints cold water. Steep 30 or 40 minutes; take out, and add 1 ounce sulphate of iron (copperas), dissolved in hot water; steep the silk 30 minutes longer.

305. Brown for Worsted or Wool. Water, 3 gallons; bichromate of potash, $\frac{1}{2}$ ounce. Boil the goods in this 40 minutes; wash out in cold water. Then take 3 gallons water, 6 ounces peachwood, and 2 ounces turmeric. Boil the goods in this 40 minutes; wash out.

306. Imperial Blue for Silk, Wool, and Worsted. Water, 1 gallon; sulphuric acid, a wine-glassful; imperial blue, 1 table-spoonful or more, according to the shade required. Put in the silk, worsted, or wool, and boil 10 minutes; wash in a weak solution of soap lather.

307. Sky Blue for Worsted and Woolen. Water, 1 gallon; sulphuric acid, a wine-glassful; glauber salts in crystals, 2 table-spoonfuls; liquid extract of indigo, 1 tea-spoonful. Boil the goods about 15 minutes; rinse in cold water.

308. Claret for Wool or Worsted. A Short Way of Dyeing the Same. Water, 3 gallons; cudbear, 12 ounces; logwood, 4 ounces; old fustic, 4 ounces; alum, $\frac{1}{2}$ ounce. Boil the goods in it 1 hour. Wash. This will dye from 1 to 2 pounds of material.

309. Crimson for Worsted or Wool. Water, 3 gallons; paste cochineal, 1 ounce; cream of tartar, 1 ounce; nitrate of tin (*see No. 113*), a wine-glassful. Boil your goods in this 1 hour. Wash first in cold water, then in another vessel with 3 gallons warm water with a cupful of ammonia, the whole well mixed. Put in the goods and work well 15 minutes. For a bluer shade add more ammonia. Then wash out.

310. Fawn Drab for Silk. Hot water, 1 gallon; annatto liquor (*see No. 95*), 1 wine-glassful; 2 ounces each of sumach and fustic. Add copperas liquor according to the required shade. Wash out. It is best to use the copperas liquor in another vessel, diluted according to the shade desired.

311. Dark Drab for Silk may be obtained by using a little archil and extract of indigo.

312. Flesh Color for Dyeing Silk. Boiling water, 1 gallon; put in 1 ounce white soap, and 1 ounce pearlash. Mix well, then add a cupful of annatto liquor. (*See No. 95.*) Put the silk through several times, and proportion the liquor till you obtain the required shade.

313. Salmon Color for Silk may be obtained by first passing through the above liquor, and then through diluted muriate of tin. (*See No. 113.*)

314. Magenta for Silk, Wool or Worsted. Water, 1 gallon, heated up to 180 degrees; and magenta liquor, 1 table-spoonful; stir it well up. This will dye a broad ribbon 4 yards long, or a pair of small stockings. To dye a larger quantity of material, add more magenta liquor and water. The shade of color may be easily regulated by using more or less. Magenta Pink may be obtained by increased dilution.

315. Mauve for Silk, Wool or Worsted. Water, 1 gallon; add 1 table-spoonful sulphuric acid; then heat to boiling point. For a *very light mauve*, add 1 tea-spoonful imperial violet liquor; boil the same amount of material, as stated under Magenta, about 10 minutes. Rinse in cold water. If the color be too deep, use a little soap in rinsing, using warm water.

316. Violet Color for Worsted may be produced by using a table-spoonful of violet liquor instead of a tea-spoonful.

317. Pea Green for Silk. To 1 quart water, put $\frac{1}{2}$ tea-spoonful picric acid, and rather more than $\frac{1}{4}$ wine-glassful sulphuric acid, and a tea-spoonful paste extract of indigo; boil about 5 minutes, then add water to cool it down to blood heat, or 100° Fahr. Put in the silk, and work it about 20 minutes. The shade may be varied by adding more or less of the picric acid, or extract of indigo; if more of either be added, boil separately in a little water, and add to the previous liquor.

318. Pea Green for Worsted. Use the same materials as the aforesaid; but boil all the time in 1 gallon of water for about 20 or 30 minutes.

319. Dark Green for Worsted. This may be obtained by using a larger quantity of material, in the same way as the last.

320. Plum Color for Worsted, Silk or Cotton. Water, 1 gallon; sulphuric acid, 1 tea-spoonful; glauber salts, in crystals, 2 table-spoonfuls; violet liquor, 1 table-spoonful; magenta liquor, $\frac{1}{2}$ table-spoonful. Boil the article (silk, wool or worsted), about 10 minutes.

321. Remarks on Dyeing Cotton. Cotton should be dyed the above colors separately, and by first running them through weak gall liquor, and weak double muriate of tin. Then wash well, and work in the aforesaid liquor, according to color and shade. The dyeing liquor should be cold.

322. Scarlet on Worsted or Wool. 3 gallons water, 2 ounces dry cochineal, 1 ounce cream of tartar, 1 wine-glassful nitrate of tin; boil the goods 1 hour. To give the goods a yellower hue, add a little young fustic to the above mixture. Wash out as before.

323. Yellow for Dyeing Silk. Proceed the same as in dyeing pea green, omitting the extract of indigo, and using oxalic tin instead of sulphuric acid.

324. To Dye Feathers. First steep them a few hours in warm water.

325. Blue may be dyed by extract of indigo and boiling water. Simmer over the fire a few minutes.

326. Green. Verdigris and verditer, 1 ounce each; and gum water. Dip the feathers. Or mix the indigo liquor with Persian berry liquor.

327. Lilac. Use cudbear and hot water.

328. Red. Brazil wood, a little vermilion and alum, and vinegar. Boil 30 minutes, and then dip the feathers.

329. Yellow, by turmeric.

330. Scarlet, by cochineal, cream of tartar, and muriate of tin. (See No. 113.)

331. To Dye Dove or Slate Color. Boil a teacup of black tea in an iron pot, adding a tea-spoonful of copperas. The depth of color will depend on the quantity of water used. Dye the articles in this and then hang them up to drain, finally rinsing out in soapsuds.

332. Aniline Red. This produces a color varying from the deepest crimson to a very brilliant and beautiful rose pink, according to the strength of the dye. All that is necessary is to enclose the aniline in a small muslin bag, and having a kettle (tin or brass) filled with moderately hot water, rub the substance out. Then immerse the articles to be colored, and in a short time they are done. The dye is so readily absorbed that care is required to prevent spotting. No mordant is required, although it improves the color to wring the goods out of strong soapsuds before putting them in the dye. This is a permanent color for woolen or silk.

333. Aniline Blue. To 100 pounds of fabric dissolve $1\frac{1}{2}$ pounds aniline blue in 3 quarts hot alcohol; strain through a filter and add it to a bath of 130° Fah.; also 10 pounds glauber salts, and 5 pounds acetic acid. Enter the goods and handle them well for 20 minutes; next heat it slowly to 200° Fah.; then add 5 pounds sulphuric acid diluted with water. Let the whole boil 20 minutes longer, then rinse and dry. If the aniline be added in two or three proportions during the process of coloring, it will facilitate the evenness of the color. Hard and close wove fabrics, such as braid, ought to be prepared in a boiling solution of 10 pounds sulphuric acid and 2 pounds tartaric acid before coloring with the aniline, as this will make the fabric more susceptible to the color.

334. To Dye Hats. A bath for dyeing 12 dozen hats consists of 144 pounds logwood, 12 pounds green sulphate of iron or copperas, $7\frac{1}{2}$ pounds verdigris. The copper is made of a semi-cylindrical shape, and should be surrounded with an iron jacket, or case, into which steam may be admitted, so as to raise the temperature of the interior bath to 190° Fah., but no higher; otherwise the heat is apt to affect the stiffening varnish, called the gum, with which the body of the hat has been imbued. The logwood having been introduced and digested for some time, the copperas and verdigris are added in successive

quantities, and in the above proportions, along with every successive two or three dozen of hats suspended upon the dipping machine. Each set of hats, after being exposed to the bath, with occasional airings, during 40 minutes, is taken off the pegs, and laid out upon the ground to be more completely blackened by the peroxydization of the iron with the atmospheric oxygen. In 3 or 4 hours the dyeing is completed. When fully dyed, the hats are well washed in running water.

335. Spirit Stiffening for Hats. 7 pounds orange shellac; 2 pounds gum sandarac; 4 ounces gum mastic; $\frac{1}{2}$ pound amber resin; 1 pint solution of copal; 1 gallon spirit of wine, or wood naphtha.

The shellac, sandarac, mastic, and resin are dissolved in the spirit, and the solution of copal is added last.

336. Alkali Stiffening for Hats. 7 pounds common block shellac; 1 pound amber resin; 4 ounces gum thus; 4 ounces gum mastic; 6 ounces borax; $\frac{1}{2}$ pint solution of copal.

The borax is first dissolved in about 1 gallon warm water. This alkaline liquor is put into a copper pan (heated by steam), together with the shellac, resin, thus, and mastic, and allowed to boil for some time, more warm water being added occasionally until it is of a proper consistence; this may be known by pouring a little on a cold slab, somewhat inclined, and if the liquor runs off at the lower end, it is sufficiently fluid. If, on the contrary, it sets before it reaches the bottom, it requires more water. When the whole of the gums seem dissolved, $\frac{1}{2}$ pint of wood naphtha must be introduced, with the solution of copal; then the liquor must be passed through a fine sieve, and it will be perfectly clear and ready for use. This stiffening is used hot. The hat bodies, before they are stiffened, should be steeped in a weak solution of soda in water, to destroy any acid that may have been left in them (as sulphuric acid is used in the making of the bodies.) If this is not attended to, should the hat body contain any acid when it is dipped into the stiffening, the alkali is neutralized, and the gums consequently precipitated. After the body has been steeped in the alkaline solution, it must be perfectly dried in the stove before the stiffening is applied; when stiffened and stoved, it must be steeped all night in water to which a small quantity of the sulphuric acid has been added; this sets the stiffening in the hat body, and finishes the process.