the time, waived; the various colors being known, commercially, as anilines, are so classified, although several of them have a different origin.

RED.

Magenta.

This color, which is also called *rosein*, *fuchsin*, and *anilin red*, is the best known of the series. It is better adapted for the preparation of a liquid dye than any other. In the hands of the amateur it can be used with economy, and the results obtained are, generally, satisfactory. It is readily soluble in alcohol, and to some extent, in water. The latter property is taken advantage of by dyers, the dye bath being prepared, directly, from the crystals. It is, however, preferable to use alcohol for dissolving the color, as the solubity in water is not always the same with different samples.

SOLUTION.—To 1 pound of the crystals add 2½ gallons of spirit 65 o. p. The solution may be conveniently made in an ordinary five gallon tin. Agitate frequently, and add 2½ gallons of hot water. This product will be suitable for sale as a liquid dye, but for dyer's use, where a large quantity of water is admissible, 1½ gallons of spirit will be found sufficient. It is sometimes necessary to filter before using.

APPLICATION.—*Silk and Wool*—Sufficient water to cover, without difficulty, the fabric to be dyed, is brought to a temperature of about 170° F.; a sufficient quantity of the dye is added, and followed by the immersion of the goods, which should be moved about to prevent streaks. About half an hour's immersion is sufficient. Half an ounce of the crystals should give a fair shade to 10 pounds of wool. A bath of soap suds is sometimes employed instead of water, and by the use of alkali, brighter, but perhaps, less permanent colors are produced. Acids render the shade dull and bluish.

Cotton—Place the cotton in a bath of sumac—1 pound sumac to 10 pounds cotton—for two hours. Wring out, and dye as wool. A brighter shade is given by dissolving ½ oz. of soap in hot water, letting the solution cool to 90° adding 2½ oz. olive oil, and mixing with tepid water. In this 5 pounds of cotton may be worked for