

about five minutes. A bath containing $\frac{1}{4}$ pound of sumac, and one ounce of tin crystals is next prepared, through which the cotton should be passed, wrung out, and finally dyed in a bath of magenta and pure water-

Cerise and Safranine.

These colors resemble magenta in appearance, and appear to be varieties of that substance. They are readily soluble in alcohol, and more or less so in water. The colors produced are similar to those obtained from safflower, but possess greater vivacity and permanence. The shades are exceedingly delicate and beautiful, inclining to pink with a shade of yellow.

SOLUTION AND APPLICATION.—As Magenta.

Crimson.

A solid dye belonging to the same series as the preceding, is sold as crimson, but it does not appear to differ very materially from magenta, giving shades with a trifle less blue. It is applied in the same manner as magenta. Much better colors are obtained by the use of anilin yellow and magenta. The former may be applied in the manner indicated for that color, and the fabric so dyed must be passed through a bath of magenta until the required shade is produced. By mixing the liquid yellow and magenta dyes in a bath of soap-suds, nearly every shade from magenta to orange may be obtained. This will be found a satisfactory method for amateurs.

Scarlet.

To produce this color, either the so-called scarlet dye, or corallina, may be used. Neither of these are adapted for amateur use, as greater exactness is required in compounding the dye bath, than the rule of thumb system will admit. For non-professionals I decidedly recommend the use of anilin yellow and magenta, as indicated, for crimson. To produce scarlet the yellow should predominate, or the both may be rendered slightly sour by sulphuric acid.

SOLUTION.—*Scarlet.*—This color dissolves easily in water, and the bath may be made directly from the solid substance. A liquid