

Chrome Green.

OXIDES of chrome are prepared either in the dry or wet way; obtained thus, they vary from greenish gray to a more or less deep greenish yellow. They generally have neither brilliancy nor freshness. It is possible, however, to produce green oxides of chrome which are not devoid of beauty. One of the most intelligent chemists of the commercial world, M. Casthelaz, has conjointly with M. Leune, prepared a chrome green, which is justly styled imperial green. This coloring matter of a superior brilliancy is obtained exclusively by the wet way. The process consists in slowly precipitating chrome salts, by treating them with hydrated metallic oxides, insoluble, or but slightly soluble in water, or by hydrated metallic carbonates, or by hydrated metallic sulphides, or, again, by other salts of weak acids which easily leave their bases; the action is only produced progressively, and the oxide of chromium is precipitated in the hydrated form; the color of the compound is magnificent, of a deep emerald green. For this preparation, it is convenient to adopt economical reagents, such as gelatinous alumina, oxide of zinc, carbonate of zinc, sulphide of zinc, etc., whose price is reasonable. The same result may be obtained by treating a chrome salt with the non-alkaline metals, which have a sufficient affinity to unite with the acid of the chrome salt and precipitate the oxide. Iron and zinc will be most generally used, as they are cheaper. It is necessary to select from among the metals, with their oxides and salts, those which, with the acid of the chrome salt, give soluble salts, as they should be removed by washing. If recourse is had to reagents, forming, with the acid of the chrome salt, insoluble salts, it is only in order to modify the color and composition of the chrome precipitates and of the green color thus formed. As to the magnificent imperial green color obtained by M. Casthelaz, it possesses properties which will enable manufacturers ultimately to renounce the justly condemned and dangerous copper and arsenic greens. The use of the imperial green removes all danger from insalubrity; it is an impalpable substance, of perfect tenacity. It is believed that this property will cause

the new green to be adopted for printing on stuffs and for other purposes. The oxides of chrome known up to the present time, and generally obtained in the dry way, can not by pulverization attain to the degree of fineness of the imperial green. It is expected that this substance will have great success in oil-painting, colored papers, colors, and artificial flowers, printing, lithography, perfumery, and soap manufacture, as well as in the making of glass and in the ceramic arts.—*Moniteur Scientifique.*
