

tures. "Carmin lake" is a pigment obtained by adding freshly precipitated alumina to decoction of cochineal.

**CARMINE**, a pigment of a bright red colour obtained from cochineal (*q.v.*). It may be prepared by exhausting cochineal with boiling water and then treating the clear solution with alum, cream of tartar, stannous chloride, or acid oxalate of potassium; the colouring and animal matters present in the liquid are thus precipitated. Other methods are in use; sometimes white of egg, fish glue, or gelatine are added before the precipitation. The quality of carmine is affected by the temperature and the degree of illumination during its preparation—sunlight being requisite for the production of a brilliant hue. It differs also according to the amount of alumina present in it. It is sometimes adulterated with cinnabar, starch and other materials; from these the carmine can be separated by dissolving it in ammonia. Good carmine should crumble readily between the fingers when dry. Chemically, carmine is a compound of carminic acid with alumina, lime and some organic acid. Carmine is used in the manufacture of artificial flowers, water-colours, rouge, cosmetics and crimson ink, and in the painting of minia-