

until reduced by friction to clay or impalpable powder. As the polish depends almost entirely on these two operations, care must be taken that they are performed with a regular and steady movement. When the marble has received the first polish, the flaws, cavities, and soft spots are sought out and filled with mastic of a suitable color. This mastic is usually composed of a mixture of yellow wax resin and Burgundy pitch, mixed with a little sulphur and plaster passed through a fine sieve, which gives it the consistency of a thick paste, to color this paste to a tone analogous to the ground tints or natural cement of the material upon which it is placed, lampblack and rouge, with a little of the prevailing color of the material, are added. For green or red marbles, this mastic is sometimes made of gum lac, mixed with Spanish sealing wax of the color of the marble, it is applied with pincers, and these parts are polished with the rest. Sometimes crushed fragments of the marble worked are introduced into the cement but for fine marbles, the same colors are employed which are used in painting, and which will produce the same tone as the ground; the gum lac is added to give it body and brilliancy. The third operation of polishing consists in rubbing it again with a hard pumice stone, under which water is constantly being poured, unmixed with sand. For the fourth process called softening the ground, lead filings are mixed with the emery mud produced by the polishing of mirrors, or the working of precious stones, and the marble is rubbed with a compact linen cushion, well saturated with this mixture, rouge is also used for this polish. For some outside works, and for hearths and paving tiles, marble workers confine themselves to this polish. When the marbles have holes or grains, a lead muller is substituted for the linen cushion. In order to give a perfect brilliancy to the polish the gloss is applied. Well wash the prepared surfaces and leave them until perfectly dry, then take a linen cushion, moistened only with water, and a little powder of calcined tin of the first quality. After rubbing with this for some time, take another cushion of dry rags, rub with it lightly, brush away any foreign substance which might scratch the marble,

and a perfect polish will be obtained. A little alum mixed with the water used penetrates the pores of the marble, and gives it a speedier polish. This polish spots very easily, and is soon tarnished and destroyed by dampness. It is necessary when purchasing articles of polished marbles to subject them to the test of water; if there is too much alum the marble absorbs the water and a whitish spot is left.

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