

(39.) Ex. 4. (35.) III. In the granite quarries near Seringapatam, the most enormous blocks are separated from the solid rock by the following neat and simple process. The workman, having found a portion of the rock sufficiently extensive, and situated near the edge of the part already quarried, lays bare the upper surface, and marks on it a line in the direction of the intended separation, along which a groove is cut with a chisel about a couple of inches in depth. Above this groove a narrow line of fire is then kindled, and maintained till the rock below is thoroughly heated, immediately on which a line of men and women, each provided with a pot full of cold water, suddenly sweep off the ashes, and pour the water into the heated groove, when the rock at once splits with a clean fracture. Square blocks of six feet in the side, and upwards of eighty feet in length, are sometimes detached by this method, or by another equally simple and efficacious, but not easily explained without entering into particulars of mineralogical detail.*

(40.) Ex. 5. (35.) III. Hardly less simple and efficacious is the process used in some parts of France, where mill-stones are made. When a mass of stone sufficiently large is found, it is cut into a cylinder several feet high, and the question then arises how to subdivide this into horizontal pieces, so as to make as many mill-stones. For this purpose, horizontal indentations or grooves are chiseled out quite round the cylinder, at distances corresponding to the thickness intended to be given to the mill-stones, into which wedges of dried wood are driven. These are then wetted, or exposed to the night dew, and next morning the different pieces are found separated from each other by the expansion of the wood, consequent on its absorption of moisture; an irresistible natural power thus accomplishing, almost without any trouble, and at no expense, an operation which, from the peculiar

* Such a block would weigh between four and five hundred thousand pounds. See Dr. Kennedy's "Account of the Erection of a Granite Obelisk of a Single Stone about Seventy Feet high, at Seringapatam." —*Ed. Phil. Trans.* vol. ix. p. 312.