yards wide, yet the ridges exactly correspond and leave a deep cavity between them.\* It is very common to find in perpendicular clefts shells broken in half, and each piece remaining fastened to the stone on the opposite side; which proves these shells were placed in the solid stratum, and before the cleft was made.<sup>+</sup>

In some matters the perpendicular clefts are very wide, as in the quarries quoted by Shaw, which perhaps is the reason that they are not so frequently met with. In the quarries of flint and granate, the stone may be cut out in very large pieces without the smallest inconveniency, as the obelisks and pillars seen at Rome, which are upwards of sixty, eighty, an hundred, or one hundred and fifty feet long. It appears that these large pillars were raised from the quarry, and that they are to be had of any required thickness, as well as some species of free-stone. There are other matters where these perpendicular strata are very narrow; as in clay, marl, and chalk, and they are wider in marble and most hard stones. Some are imperceptible from being filled with a matter nearly similar to that of the stone itself, which Dd2 nevertheless

\* See Shaw's Travels, vol. II. p. 83.

† See Woodward, page 198.