

Paley has beautifully, and with his usual felicity, described the Unity and Universality of Providential care, as extending from the construction of a ring of two hundred thousand miles diameter, to surround the body of Saturn, and be suspended, like a magnificent arch, above the heads of his inhabitants, to the concerting

A.) analogous to those of a common feather. These filaments terminate inwards on a straight line, or base, where they usually form an acute angle with the outer edges of the marginal bands. Secondly, two marginal bands, B. B., dividing the base of the filaments from the body of the shaft; the surface of these bands, B., usually exhibits angular lines of growth in the smaller fossil pens (Pl. 28, Fig. 6, and Pl. 29, Fig. 2,) which become obtuse and vanish into broad curves, in larger specimens, Pl. 29, Fig. 1, and Pl. 30. Thirdly, the broad shaft, which forms the middle of the pen, is divided longitudinally into two equal parts by a straight line, or axis, C. : it is made up of a number of thin plates, of a horn-like substance, laid on each other, like thin sheets of paper in pasteboard; these thin plates are composed alternately, of longitudinal, and transverse fibres; the former (Pl. 28, Fig. 7, f. f.) straight, and nearly parallel to the axis of the shaft, the latter (Pl. 28, Fig. 7, e. e.) crossing the shaft transversely in a succession of symmetrical and undulating curves. These transverse fibres do not interlace the others, as the woof interlaces the weaver's warp, but are simply laid over, and adhering to them, as in the alternate laminæ of paper made from slices of papyrus; the strength of such paper much exceeds that made from flax or cotton, in which the fibres are disposed irregularly in all directions. The fibres of both kinds are also collected at intervals into fluted fasciculi, Pl. 30, f, and e, forming a succession of grooves and ridges fitted one into another, whereby the entire surface of each plate is locked into the surface of the adjacent plate, in a manner admirably calculated to combine elasticity with strength.