new wonder of the world to be erected. Former experience is here of little avail, and common principles and means have been already tried in vain; the architect is thrown almost entirely on his own resources; and they do not fail him. In order to combat the force of those overpowering elements to which the future structure is to be constantly exposed, he looks about for that *natural* form which is found most permanently to resist a similar conflict; and viewing with a philosophic eye the expanded base of the oak, and the varying proportions of its rising stem, he made the happy selection of this object as the type of the proportions of his intended work.

"On this occasion," he himself says <sup>z</sup>, "the "natural figure of the waist or bole of a large "spreading oak presented itself to my imagina-"tion. Let us for a moment consider this tree: "suppose at twelve or fifteen feet above its base, "it branches out in every direction, and forms "a large bushy top, as we often observe. This "top, when full of leaves, is subject to a very "great impulse from the agitation of violent "winds; yet partly by its elasticity, and partly "by the natural strength arising from its figure, "it resists them all, even for ages, till the gra-"dual decay of the material diminishes the co-"herence of the parts, and they suffer piece-

<sup>z</sup> A Narration of the Building, &c. of the Eddystone Lighthouse, London, 1791, p. 42.