

and thus Architecture prepared the way for Mechanics. But this advance required several centuries. The interval between the admirable cathedrals of Salisbury, Amiens, Cologne, and the mechanical treatises of Stevinus, is not less than three hundred years. During this time, men were advancing towards science; but in the mean time, and perhaps from the very beginning of the time, art had begun to decline. The buildings of the fifteenth century, erected when the principles of mechanical support were just on the verge of being enunciated in general terms, exhibit those principles with a far less impressive simplicity and elegance than those of the thirteenth. We may hereafter inquire whether we find any other examples to countenance the belief, that the formation of Science is commonly accompanied by the decline of Art.

The leading principle of the style of the Gothic edifices was, not merely that the weights were supported, but that they were seen to be so; and that not only the mechanical relations of the larger masses, but of the smaller members also, were displayed. Hence we cannot admit, as an origin or anticipation of the Gothic, a style in which this principle is not manifested. I do not see, in any of the representations of the early Arabic buildings, that distribution of weights to supports, and that mechanical consistency of parts, which would elevate them above the character of barbarous architecture. Their masses are broken into innumerable members, without subordination or meaning, in a manner suggested apparently by caprice and the love of the marvellous. "In the construction of their mosques, it was a favorite artifice of the Arabs to sustain immense and ponderous masses of stone by the support of pillars so slender, that the incumbent weight seemed, as it were, suspended in the air by an invisible hand."⁸ This pleasure in the contemplation of apparent impossibilities is a very general disposition among mankind; but it appears to belong to the infancy, rather than the maturity of intellect. On the other hand, the pleasure in the contemplation of what is clear, the craving for a thorough insight into the reasons of things, which marks the European mind, is the temper which leads to science.

6. *Treatises on Architecture*.—No one who has attended to the architecture which prevailed in England, France, and Germany, from the twelfth to the fifteenth century, so far as to comprehend its beauty, harmony, consistency, and uniformity, even in the minutest parts and most obscure relations, can look upon it otherwise than as a remark-

⁸ *Mahometanism Unveiled*, ii. 255.