## INTRODUCTION.

The progress of modern improvement is distinguished, in a particular manner, by the strictly scientific character of every department of human industry. To satisfy the reason, is as imperative, in these days of freedom of thought and of speech, as to satisfy the conscience. Men do not now rest contented with the naked formula, which has been handed down from a preceding generation; but are prone to question every one of its purposes and adaptations, in the true spirit of the Baconian philosophy, and with a perseverance and exactitude that would astonish the older and most devout followers of Aristotle. It matters not, in which one of the many avenues of industrial life; we choose to cast an enquiring glance; whether it be the modeling of the optical lens, or the construction of a suspension bridge; the same studious observance of natural principles, as a rule and as a guide, is manifested in every individual act of the expert mechanician.

The fine arts too, and also the more intellectual traits of certain professions, participate in this advancement. In particular departments, much, no doubt, has been handed down, to us, from a remote antiquity, that is perfect both in the conception of true principles. and the design of construction. Such, for example, are those oldest Grecian types of the male and female forms, which indicate corresponding mental characteristics. Among the voluminous and diversified treasures of ancient learning, there is nothing to be compared: with the truthfulness of the conception of the human figure, possessed by the earlier Greeks; a truthfulness consisting, in the exact correspondence of the productions of art, with the real objects in nature that they were intended to represent. Our sculptors and painters have received from them the rules of art, so perfect as to be beyond the reach of criticism. The contrast between the sexes, the opposition of the masculine and feminine, is beautifully exemplified in the correspondence of their corporeal with their mental aspects. In stature, the male being large, the female small; the breadth of chest and shoulders of the first, their narrowness in the second; the narrow