

14. (4.) The way is now prepared for our next adaptation, which hinges upon this—that the highest efforts of intellectual power, and to which few men are competent, the most difficult intellectual processes, requiring the utmost abstraction and leisure for their development, are often indispensable to discoveries, which, when once made, are found capable of those useful applications, the value of which is felt and recognised by all men. The most arduous mathematics had to be put into requisition, for the establishment of the lunar theory—without which our present lunar observations could have been of no use for the determination of the longitude. This dependence of the popular and the practical on an anterior profound science runs through much of the business of life, in the mechanics and chemistry of manufactures as well as in navigation; and indeed is more or less exemplified so widely, or rather universally, throughout the various departments of human industry and art, that it most essentially contributes to the ascendancy of mind over muscular force in society—besides securing for mental qualities, the willing and reverential homage of the multitude. This peculiar influence stands complicated with other arrangements, requiring a multifarious combination, that speaks all the more emphatically for a presiding intellect, which must have devised and calculated the whole. We have already