

intellect? In proportion as the number of those who are engaged on each department of physical inquiry increases, and the geographical extent over which they are spread is enlarged, a proportionately increased facility of communication and interchange of knowledge becomes essential to the prosecution of their researches with full advantage. Not only is this desirable, to prevent a number of individuals from making the same discoveries at the same moment, which (besides the waste of valuable time) has always been a fertile source of jealousies and misunderstandings, by which great evils have been entailed on science; but because methods of observation are continually undergoing new improvements, or acquiring new facilities, a knowledge of which, it is for the general interest of science, should be diffused as widely and as rapidly as possible. By this means, too, a sense of common interest, of mutual assistance, and a feeling of sympathy in a common pursuit, are generated, which proves a powerful stimulus to exertion; and, on the other hand, means are thereby afforded of detecting and pointing out mistakes before it is too late for their rectification.

(385.) Perhaps it may be truly remarked, that, next to the establishment of institutions having either the promotion of science in general, or, what is still more practically efficacious in its present advanced state, that of particular departments of physical inquiry for their express objects, nothing has exercised so powerful an influence on the progress of modern science as the publication of monthly and quarterly scientific journals, of which there is now scarcely a nation in Europe which does not produce several. The quick and universal circulation of these, places observers of all countries on the same level of perfect intimacy with each other's objects and methods, while the abstracts they from time to time (if well conducted) contain of the most important researches of the day, consigned to the more ponderous tomes of academical collections, serve to direct the course of general observation, as well as to hold out, in the most conspicuous manner, models for emulative