as every enlargement of the domain of experimental discovery may be traced to some refinement of instruments or modes of observing; so has the progress of physical science been related to that of analytical. At the present time the two appear to have, unhappily, somewhat parted company; analysis is going its own way without seeming to heed its companion, and philosophy is dragging heavily from the desertion: or, to quit metaphor, most of our sciences have now reached that point where the problems pressing for solution involve no doubt or difficulty as to the principles to be employed, but are irreducible simply from the enormous difficulty and complication of the analytical processes which at present are at our command. Whether the deadlock is to be got over by the laborious calculations of algorithms—such as tabulating the values of numerous definite integrals—or whether our known methods are to give rise to a new one, which shall at once include and supersede them—who can tell?

Apart from its rendering the history incomplete, Professor Forbes's determination is the more to be regretted from the biographical form which he has adopted, as an apparent injustice arises to individuals whose analytical labors (apart from merit on their own abstract ground) should claim, though indirectly, a share in the triumphs of science. The man who invents a theorem may be, even by its practical outcome, more praiseworthy than he who has made a successful experiment or even determined a natural law.

In filling in the outline which we have already quoted, Professor Forbes has had before him the "History of the Inductive Sciences," and the "Kosmos," works of which praise would be an impertinence; he has, however, wisely evaded coming into competition with these by the plan he has adopted of connecting the history of each science with the biographies of those who contributed to its rise and progress. Whatever is thus lost in the continuity of the history is atoned for by the human interest with which it becomes invested. Some one has remarked that the life of a man of science rarely presents any incidents of interest apart from his science; reciprocally, it is here shewn that the history of science can only be thoroughly understood by aid of the lives of those who have spent themselves in her service. In addition to the physical sciences, Professor Forbes has included the mechanical and kindred arts, and we cannot resist quoting the following eloquent passage, which justifies (if justification were necessary) his course:—

> My chief reason for including such subjects as the steam-engine, the strength of materials, and some great examples of construction, and the electric telegraph, is that these important practical improvements are both historically and logically interwoven with the progress of pure and abstract Physics. They have besides