

the annals of mankind had furnished nothing similar. It seemed, too, as if Nature herself seconded the impulse; and, while she supplied new and extraordinary aids to those senses which were henceforth to be exercised in her investigation,—while the telescope and the microscope laid open *the infinite* in both directions,—as if to call attention to her wonders, and signalize the epoch, she displayed the rarest, the most splendid and mysterious, of all astronomical phenomena, the appearance and subsequent total extinction of a new and brilliant fixed star twice within the lifetime of Galileo himself.*

(107.) The immediate followers of Bacon and Galileo ransacked all nature for new and surprising facts, with something of that craving for the marvellous, which might be regarded as a remnant of the age of alchemy and natural magic, but which, under proper regulation, is a most powerful and useful stimulus to experimental inquiry. Boyle, in particular, seemed animated by an enthusiasm of ardor, which hurried him from subject to subject, and from experiment to experiment, without a moment's intermission, and with a sort of undistinguishing appetite; while Hooke (the great contemporary, and almost the worthy rival, of Newton) carried a keener eye of scrutinizing reason into a range of research even yet more extensive. As facts multiplied, leading phenomena became prominent, laws began to emerge, and generalizations to commence; and so rapid was the career of discovery, so signal the triumph of the inductive philosophy, that a single generation and the efforts of a single mind sufficed for the establishment of the system of the universe, on a basis never after to be shaken.

(108.) We shall now endeavor to enumerate and explain in detail the principal steps by which legitimate and extensive inductions are arrived at, and the processes by which the mind, in the investigation of

* The temporary star in Cassiopeia, observed by Cornelius Gemma, in 1572, was so bright as to be seen at noon-day. That in Serpentarius, first seen by Kepler in 1604, exceeded in brilliancy all the other stars and planets.