

valuable experiments began to be made by physicians and chemists, desirous of discovering and describing new chemical remedies. The chemical and metallurgic arts, exercised by persons empirically acquainted with their secrets, began to be seriously studied with a view to the acquisition of rational and useful knowledge, and regular treatises on branches of natural science at length to appear. George Agricola, in particular, devoted himself with ardor to the study of mineralogy and metallurgy in the mining districts of Bohemia and Schemnitz, and published copious and methodical accounts of all the facts within his knowledge: and our countryman, Dr. Gilbert, of Colchester, in 1590, published a treatise on magnetism, full of valuable facts and experiments, ingeniously reasoned on; and he likewise extended his inquiries to a variety of other subjects, in particular to electricity.

(104.) But, as the decisive mark of a great commencing change in the direction of the human faculties, astronomy, the only science in which the ancients had made any real progress, and ascended to any thing like large and general conceptions, began once more to be studied in the best spirit of a candid philosophy; and the Copernican or Pythagorean system arose or revived, and rapidly gained advocates. Galileo at length appeared, and openly attacked and refuted the Aristotelian dogmas respecting motion, by direct appeal to the evidence of sense, and by experiments of the most convincing kind. The persecutions which such a step drew upon him, the record of his perseverance and sufferings, and the ultimate triumph of his opinions and reasonings, have been too lately and too well related\* to require repetition here.

(105.) By the discoveries of Copernicus, Kepler, and Galileo, the errors of the Aristotelian philosophy were effectually overturned on a plain appeal to the facts of

the patient as hell does:" in short, a kind of counterbalance to his opium.

\* See the Life of Galileo Galilei, by Mr. Drinkwater, with Illustrations of the Advancement of Experimental Philosophy.