The term *Momentum* had been introduced to express the force of bodies in motion, before it was known what that effect was. Galileo, in his *Discorso intorno alle Cose che stanno in su l'Acqua*, says, that "Momentum is the force, efficacy, or virtue, with which the motion moves and the body moved resists, depending not upon weight only, but upon the velocity, inclination, and any other cause of such virtue." When he arrived at more precision in his views, he determined, as we have seen, that, in the same body, the Momentum is *proportional* to the Velocity; and, hence it was easily seen that in different bodies it was proportional to the Velocity and Mass jointly. The principle thus enunciated is capable of very extensive application, and, among other consequences, leads to a determination of the results of the mutual Percussion of Bodies. But though Galileo, like others of his predecessors and contemporaries, had speculated concerning the problem of Percussion, he did not arrive at any satisfactory conclusion; and the problem remained for the mathematicians of the next generation to solve.

We may here notice Descartes and his Laws of Motion, the publication of which is sometimes spoken of as an important event in the history of Mechanics. This is saying far too much. The *Principia* of Descartes did little for physical science. His assertion of the Laws of Motion, in their most general shape, was perhaps an improvement in form; but his Third Law is false in substance. Descartes claimed several of the discoveries of Galileo and others of his contemporaries; but we cannot assent to such claims, when we find that, as we shall see, he did not understand, or would not apply, the Laws of Motion when he had them before him. If we were to compare Descartes with Galileo, we might say, that of the mechanical truths which were easily attainable in the beginning of the seventeenth century, Galileo took hold of as many, and Descartes of as few, as was well possible for a man of genius.

[2d Ed.] [The following remarks of M. Libri appear to be just. After giving an account of the doctrines put forth on the subject of Astronomy, Mechanics, and other branches of science, by Leonardo da Vinci, Fracastoro, Maurolycus, Commandinus, Benedetti, he adds (*Hist. des Sciences Mathématiques en Italie*, t. iii. p. 131): "This short analysis is sufficient to show that, at the period at which we are arrived, Aristotle no longer reigned unquestioned in the Italian Schools. If we had to write the history of philosophy, we should prove by a multitude of facts that it was the Italians who overthrew the ancient idol of philosophers. Men go on incessantly repeating that the strug-