

so easily handled. The correct use of scientific ideas is only learned by patient training, and should be governed by the not easily acquired habit of self-restraint. It is well known how the fundamental notions of a mechanical science, let loose into literature by Fontenelle, by D'Alembert, by Condorcet, or absorbed by Voltaire and Diderot, were expanded into a system of materialistic philosophy in 'L'Homme Machine,' the 'Système de la Nature,' and other works, the extreme views of which the great scientific thinkers could hardly approve of.<sup>1</sup> These hasty but

<sup>1</sup> As a great deal of confusion existed for a long time in European literature as to the exact succession in time of the different works which assisted to spread mechanical views of the world and of life, I put down the main dates:—

Fontenelle (1657-1757) published his *Eloges of the great Academicians*, in which the principles of the philosophy of Descartes, Leibniz, and Newton were popularly expounded and discussed, from 1700 onward. His *'Pluralité des Mondes'* had appeared already in 1686; it had popularised Cartesian ideas.

Voltaire (1694-1778) published his *'Elémens de la Philosophie de Newton'* in 1738.

La Mettrie (1709-51) published his *'Histoire naturelle de l'Âme'* in 1745, and his *'L'Homme Machine'* in 1748.

D'Alembert and Diderot published the first volume of the *'Encyclopédie'* in 1751.

Buffon (1707-88) published, 1749, his *'Théorie de la Terre,'* being the first portion of the *'Histoire naturelle.'*

Holbach (1723-89) published under the name of Mirabaud, 1770, the *'Système de la Nature.'*

Of these works, the three which

created the greatest popular sensation—*viz.*, Voltaire's *'Elémens,'* La Mettrie's *'L'Homme Machine,'* and Holbach's *'Système'*—were all published in Holland. Voltaire, D'Alembert, and Diderot appear to have approached philosophical problems mainly from the position of Newton's natural philosophy, La Mettrie from the teachings of the great Boerhaave, Holbach principally from a study of chemistry. It is unnecessary to say that none of them had the sanction of their great masters for the applications they made of principles which had been established and used for special scientific purposes. And the same may be said with reference to the influence of Locke, which in almost all the instances mentioned was combined with that of the great naturalists. But this does not belong to the line of thought in which we are interested at present. For the sake of completeness only I mention that Locke's teachings as well as Newton's were made popularly known in France by Voltaire's *'Lettres sur les Anglais'* (burnt by order of the Parliament of Paris in 1734), whereas Condillac's (1714-80) more systematic treatise, entitled *'Essai sur l'Origine des Connaissances humaines,'* appeared in 1746. It is