

It was a process of critical sifting similar to that which Kant<sup>1</sup> applied to our general metaphysical ideas, which in the middle of the century, through the writings of Berzelius and Liebig, of Schwann and Schleiden, of Henle, Lotze, and Du Bois-Reymond, gradually dispelled the older confused notions, and firmly established the mechanical view in the study of the phenomena of life. But as we are forced to recognise the substance of much of Kant's philosophical criticism in the lucid expositions of Locke and Hume before him, so it has been pointed out that the words of the eminent French physiologist, Vicq-d'Azyr, contain the substance of the more modern ideas on life.<sup>2</sup> It required the co-operation of the exact

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Mechanical  
view in  
biology.

<sup>1</sup> The great influence which belongs to Kant in the development of modern German science has been frequently dwelt on. In more recent times some of the first representatives of the medical and biological sciences have dealt with the subject, and the opposition which fifty years ago originated in the extravagances of some of Kant's successors, has given way to a renewed recognition of the just claims of Kant. We may refer to Du Bois-Reymond, who, forgetting Lotze, calls Kant the last philosopher who took a part in the work of the naturalist ('Reden,' vol. i. p. 33); to Helmholtz, who in many passages of his popular addresses refers to the merits of Kant ('Vorträge und Reden,' 1884, vol. i. pp. 44, 368; ii. 53, 227, 234, 248, &c.); to Haeser ('Geschichte der Medizin,' vol. ii. p. 811). I will add to these the opinion of so great an authority as Prof. Billroth of Vienna, who, speaking of the two modern schools of medicine in Germany, says ('Lehren

und Lernen der medicinischen Wissenschaften,' &c., p. 334): "However great the degree of independence may be which the two parallel schools have attained, they would hardly have developed so rapidly without the powerful influence which came from France and in a lesser degree from England; nor yet without that of Immanuel Kant, who in his 'Autophysiologie of Reason' enlightened German minds regarding their own selves, and who with his lively imagination fervently embraced natural science."

<sup>2</sup> The remarkable passage referred to is quoted by Du Bois-Reymond ('Reden,' vol. ii. p. 27): "Quelqu' étonnantes qu'elles nous paraissent, ces fonctions (*viz.*, dans les corps organisés) ne sont-elles pas des effets physiques plus ou moins composés, dont nous devons examiner la nature par tous les moyens que nous fournissent l'observation et l'expérience, et non leur supposer des principes sur lesquels l'esprit se repose, et croit