

functions which resist death. He adopts, on the one side, the method of looking for the explanation of the phenomena of matter in the properties of matter. In the introduction to the 'Anatomie Générale,' he says:¹ "The connection of the properties as causes with the phenomena as effects is an axiom which has become almost tiresome to repeat nowadays in physics and chemistry: if my book establishes an analogous axiom in the physiological sciences, it will have fulfilled its purpose." But being convinced of the essential difference of the object with which the physiologist is concerned,

¹ Claude Bernard (1813-78), from whose various writings the passages of Bichat are mostly taken, has very fully analysed the theoretical views of his eminent predecessor. The following books belong to the best, in substance and notably in style, that have been written on the subject: 'La Science Expérimentale,' 3^{me} ed., 1890; especially: 'Définition de la vie,' p. 149, &c.; 'Leçons sur les Phénomènes de la vie communs aux animaux et aux végétaux,' 1878, especially vol. i. p. 57, &c.; 'Rapport sur les progrès et la marche de la Physiologie générale en France,' 1867. Introduction. Although Bichat was a vitalist, he took a first and important step in the direction of getting out of the vitalistic conceptions which he inherited from Haller, and which had assumed a special form in the Montpellier school. Through his foundation of physiological research upon an anatomical study of tissues, he localised the problem of physiology. Had he proceeded further on the lines he himself started, he would have thrown off, like his successors, notably Magendie, the hypothetical distinction between physical, chemical, and vital properties, and become a pure ex-

perimentalist. The founder of this purely experimental school in France was Magendie (1783-1855). It is interesting to note that prior to Magendie in France, Charles Bell in London had led up to experimental physiology in England by his famous distinction between sensory and motor nerves (1811). But, according to Claude Bernard, this anatomical distinction required experimental verification in a living animal. Magendie furnished this in 1822, and, together with this corner-stone of modern physiology, laid the foundations of the art of vivisection, with all its wonderful discoveries and its disfavour in certain quarters. There is no doubt that for many years Paris became, through this innovation, the centre of medical teaching on the Continent. As to the distinctive merits of Bell and Magendie, see Claude Bernard's exhaustive examination ('Physiol. gén.,' p. 11, &c.), but also Du Bois-Reymond's Eloge of Johannes Müller ('Reden,' vol. ii. p. 176, &c.) According to him the "Thesis" of Bell was not generally considered to be proved till after Müller's experiments in 1831.