

means of purely mechanical, but essentially inadequate, conceptions.

On the other side Wundt's scientific studies began with that branch of physiology which had received special attention in the school of Johannes Müller: the physiology of the sense-organs and of the processes of sensation and perception.

His earliest contribution to this branch of physiology belongs to a period which witnessed the publication of two standard works of a very different character: Helmholtz's 'Physiological Optics,' followed by his 'Physiological Acoustics,' and Fechner's 'Elements of Psycho-physics.' For a considerable time Wundt's labours moved in the new region of research opened out by these two epoch-making publications, but he soon felt the necessity of studying the principles of exact reasoning contained in the application of mathematics to physical phenomena. In his treatise on the 'Axioms of Exact Science,' he dealt with a subject prepared by Kant, cultivated by the Neo-Kantians, and to which attention was attracted by the growing interest taken in Schopenhauer's writings. It was, however, essentially through his development of psycho-physical methods that he defined his attitude towards philosophical problems.

If Fechner may be termed the father of psycho-physics, it is really Wundt to whom the great enlargement and firm establishment of this branch of research is mainly due. But here we may notice a great difference between the scientific spirit which animated Spencer and that which permeates all Wundt's writings. The former soon fastened upon a definite mechanical