

which had been fully demonstrated to the educated and reading public. There has always existed in this country a class of literature which is almost entirely wanting, or has died out, on the Continent. The value of this class of literature has been differently gauged, but it never-

filled the columns of the foremost British periodicals, we find in Germany a similar agitation originating through the publication of several works which have since been generally considered as the purest expression of Materialism. The controversy begins in 1852 with the publication of Rudolf Wagner's 'Physiological Letters,' Moleschott's 'Kreislauf des Lebens,' and Carl Vogt's 'Bilder aus dem Thierleben'; it came to its height after the appearance (in 1855) of L. Büchner's 'Kraft und Stoff,' and occupied the meeting of scientific and medical men which was held in Göttingen in 1854. The subject belongs essentially to the history of philosophical thought, and can be studied in the very fair and exhaustive 'History of Materialism' written by F. A. Lange, with a distinctly idealistic tendency (English translation, three vols., by Thomas, 1880). I mention the subject in this connection, because in Germany and England attempts were made about the same time to found a general philosophy of life upon the teachings of science. This had been done about two generations earlier in France by the "Sensualistes" and the "Idéologues." For a French public neither the English nor the German controversy presented any essentially new feature, or disclosed any novel argument. The older orthodox conceptions had been abandoned very largely in France in the eighteenth century, and at once replaced by conceptions derived from science. In Germany a similar movement took

place, likewise during the eighteenth century; but, instead of exact science, it was the prevailing idealistic philosophy which was appealed to for the purpose of gaining new foundations, and science only came in when the speculative restoration was generally considered to have failed. In England, which had really supplied the beginnings both for the French sensualistic philosophy through Locke, and for German criticism through Locke and Hume, the older orthodox foundations were not materially shaken before the middle of the nineteenth century. The author of the 'Vestiges' distinctly appeals to science, though in a religious spirit, desiring to make it helpful for a general philosophical, and not merely an industrial, purpose. Again, the English movement, which really culminated in Herbert Spencer, differs from the German, being more influenced by biological conceptions, whereas in Germany the extreme system of Büchner took purely mechanical, though ill-defined, ideas—force and matter—as the shibboleth. It is significant, as showing the great general importance of Darwinism, that through it both the controversy over the 'Vestiges' in England and that over 'Materialismus' in Germany were soon cast into oblivion, though they had both to some extent prepared the way (see Lange, 'Gesch. des Mat.,' p. 570, Ausg. 1867; and Haeckel, 'Schöpfungsgeschichte,' vol. i. p. 98, 9 Aufl.)