

the book was almost completely forgotten on the Continent.<sup>1</sup> No real progress has indeed been made in the explanation of physical phenomena by the application of

1822). His 'Elements of Mechanical Philosophy' (Edinb., 1804) betray, according to Dugald Stewart, "a strong and avowed leaning to the theory of Boscovich" (Works by Hamilton, vol. v. p. 107). The theory probably found favour, among other reasons, because it seemed to give support to the prevalent corpuscular theory of light, which Euler opposed, as he did simple action at a distance. In the Scotch school of philosophy, of which Dugald Stewart was the most popular exponent, Boscovich was well known. Stewart refers to him frequently (Works by Hamilton, vol. ii. pp. 50, 107, 110, 343; vol. iii. p. 233; vol. v. p. 93 *sqq.*; vol. vii. p. 173 *sqq.*) He quotes Priestley, Robison, and James Hutton as followers of Boscovich, whilst his own adherence is certainly very qualified, and he makes a very pertinent remark in his Introduction to the 'Elements of the Philosophy of the Human Mind' (1792): "I cannot help taking this opportunity of remarking that if physical inquirers should think of again employing themselves in speculations about the nature of matter, instead of attempting to ascertain its sensible properties and laws (and of late there seems to be such a tendency among some of the followers of Boscovich), they will soon involve themselves in an inextricable labyrinth, and the first principles of physics will be rendered as mysterious and chimerical as the pneumatology of the schoolmen" (vol. ii. p. 50). Boscovich seems to have been fond of tracing mathematical curves to represent all kinds of processes, such as the intellectual advancement of the age, and he shows

graphically that this was declining (Dugald Stewart's quotation in his 'Dissertation,' Works, vol. i. p. 499).

<sup>1</sup> When Fechner published the first edition of his 'Atomenlehre' (1st ed., Leipzig, 1855; 2nd ed., 1864), he does not seem to have known of Boscovich's treatise (see p. 229 of the 2nd edition), and it was similarly unknown to the Dutch meteorologist Buys Ballot, whose curves of the attracting and repelling forces of matter agree almost exactly with those of Boscovich (see 'Fortschritte der Physik,' 1849, p. 1 *sqq.*; also Rosenberger's 'Geschichte der Physik,' vol. iii. p. 536 *sqq.*) In French scientific literature the treatise of Boscovich is mostly ignored—the 'Grande Encyclopédie' does not even give its title. In fact, French science does not consider itself beholden to the celebrated Jesuit for what I call the astronomical view of matter. See St Venant in 'Comptes Rendus,' vol. 82, p. 1223: "Plusieurs auteurs, soit anglais, soit allemands, dans ses œuvres qui sont du reste d'une haute portée, . . . se sont pris à condamner vivement, sous le nom de *théorie de Boscovich*, non pas son idée capitale de réduction des atomes à des centres d'action de forces, mais la loi même, la loi physique générale des actions fonction des distances mutuelles des particules qui les exercent réciproquement les unes sur les autres. Et ils attribuent ainsi au célèbre religieux *l'erreur grave* où sont tombés, suivant eux, Navier, Poisson et nos autres savants, créateurs, il y a un demi-siècle, de la mécanique moléculaire ou interne. Or cette loi blâmée, cette loi qui a été, mise en œuvre aussi par Laplace, &c., et