

*Matter and Motion.* By CLERK MAXWELL. Enlarged Edition. Edited by Sir J. LARMOR, F.R.S. S.P.C.K. Pp. xv, 163.

This is a very agreeable reprint of Maxwell's famous treatise on the elements of dynamics. Sir Joseph Larmor has provided it with copious notes, partly critical and explanatory, and partly referring to later experimental work such as that of Boys and Eötvös on the gravitational constant.

In addition an extra chapter from Maxwell's *Electricity* has been added, in which Maxwell explains the equations of Hamilton and Lagrange for dynamical systems. Two appendices are added by the editor, one on the relativity theory of gravitation, and the other on the principles of Least and of Varying Action. With these additions the book forms as good an introduction to the classical theory of dynamics, apart from detailed applications of it, as anyone can want. It is provided with a portrait of Maxwell; and, in these days, five shillings can hardly be better spent than in buying it.

C. D. B.

*A History of the Conceptions of Limits and Fluxions in Great Britain from Newton to Woodhouse.* By FLORIAN CAJORI, Ph.D. Open Court Company. Pp. viii, 299.

This book contains a full account of the controversies to which Newton's theory of fluxions gave rise in Britain up to about 1820, when the Leibnizian notation was almost universally adopted. Its main interest for the philosophical reader will be the valuable account of Berkeley's criticisms in the *Analyst* and subsequent controversial tracts. Many of Berkeley's objections were perfectly sound, and the controversy between him and his opponents, Walton and Jurin, really did force men to see difficulties which were masked by the great authority of Newton.

Prof. Cajori points out that the method of fluxions had the qualities of its defects, and that the uncritical acceptance of continental teaching about the Calculus, which began after 1820, was not an unmixed gain. The fluxion method at least involved the valuable notion of a limit, though this had not been very clearly defined. But the earlier followers of continental methods uncritically took over all the apparatus of real infinitesimals, a conception which—however convenient—simply covers confused thinking.

C. D. B.

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Received also :—

- A. Meinong, *Über Möglichkeit und Wahrscheinlichkeit*, Leipzig, J. A. Barth, 1915, pp. xvi, 760.
- R. Müller-Freienfels, *Persönlichkeit und Weltanschauung*, Berlin, B. G. Teubner, 1919, pp. xii, 274.
- W. E. Johnson, *Logic*, Part I, Cambridge University Press, 1921, pp. xl, 255.
- W. Brown and G. H. Thomson, *The Essentials of Mental Measurement* (Cambridge Psychological Library), Cambridge University Press, 1921, pp. x, 216.
- Graham Wallas, *Our Social Heritage*, London, G. Allen & Unwin, Ltd., 1921, pp. 292.
- De Witt H. Parker, *The Principles of Aesthetics*, Boston, Silver, Burdett, & Co., 1920, pp. 374.