

magic crystal in England; Tycho Brahe at Uraniborg, and other noted and notorious figures march across the stage. There are passages describing the observatories, alchemical laboratories and pharmacies of the sixteenth century, and with them are appropriate full-page illustrations which make the descriptions more real. There are also reproduced recipes for nauseous and complex remedies whereby all diseases may be healed, and directions, couched in alchemical language, for the transmutation of base metals into gold. To any student of the history of science the volume is well worth reading. It occupies a place by itself in scientific literature.

F. W. CLARKE.

REFLECTIONS SUGGESTED BY THE NEW THEORY OF MATTER. BY the RIGHT HON. ARTHUR JAMES BALFOUR, M.P. New York: Longmans, Green & Co. Paper, 24 pp. Price, 38 cents.

This little pamphlet is a reprint of the presidential address delivered before the British Association for the Advancement of Science at Cambridge, last August. The point of view of the author is largely given in the following quotation. Speaking of the physicist, he says: "He seeks for something deeper than the laws connecting possible objects of experience. His object is physical reality; a reality which may or may not be capable of direct perception; a reality which is in any case independent of it; a reality which constitutes the permanent mechanism of that physical universe with which our immediate empirical connection is so slight and so deceptive."

W. A. NOYES.

DIE HETEROGENEN GLEICHGEWICHTE VOM STANDPUNKTE DER PHASENLEHRE. BY H. W. BAKHUIS ROOZEBOOM. Zweites Heft: Systeme aus zwei Komponenten. Erster Teil. Braunschweig: Friedrich Vieweg und Sohn. 1904. 14×22 cm.; xii+465 pp. Price, 12.50 marks.

This number deals with two-component systems in which only one liquid phase is possible and in which only the pure components occur as solid phases. To the majority of chemists the methods of determining the solid phases will be one of the interesting chapters. Among these methods the first is the orthodox one of removing the solid phase and analyzing it. This is the one to be employed wherever possible and this is practically the only one used to any extent by inorganic and organic chemists to-day. This method is not applicable for metals, and an examination of the structure under the microscope is the only really reliable way of coming to a correct conclusion. Some conclusions can