much with the fluctuations of the margins of the continental masses during successive periods of earth history, that is, with palæogeography in a narrow sense, but more with the movements of the crust which gave rise to such fluctuations. Changes in the successive mountain belts of geological time are to be traced step by step.

The first part of the book gives a rather compressed summary of the geological history and facies observations for the whole world, and this is followed by a tectonic analysis of the major divisions. Two kinds of continental masses are separated, the circumarctic controlled by its folded margins, and the high plateaux of Gondwanaland. Finally, more general topics are discussed—among these being the polar asymmetry of the earth's crust, critical times in earth history, the cause of earth movements and many others. Throughout the work there are many new observations and, in part, new interpretations that will be of interest to tectonic geologists.

(5) The last volume before us forms the first part of the second edition of Prof. T. Arldt's great work dealing with the distribution of present and past life. At the beginning the question of the permanence of continents and oceans is asked, and the whole work will provide an answer to this question. After a stimulating essay on the methods of palæogeography, the author begins his heavy task by an exceedingly detailed examination of the distribution of present and Tertiary forms of life in the Australasian, South American and Madagascar regions, and this examination takes up the greater part of the volume.

Among this mass of detail there are several more general sections of interest to the palæogeographer, in which conclusions are drawn concerning connexions by land-bridges between the various regions dealt with. Arldt concludes that during the Mesozoic these regions were connected with the northern land masses. The first bridge to collapse was that between Australia and India, then that between India and Madagascar was broken, and finally that between South and North America. The equatorial connexion between the three regions dealt with lasted much longer, and junctions with the northern land masses, that had been severed in Eocene times, were re-established in the Pliocene. It seems, therefore, that land-bridges, in spite of Wegener and still more orthodox schools, are not yet a lost cause in palæogeography.

H. H. R.

David Gregory

David Gregory, Isaac Newton and their Circle Extracts from David Gregory's Memoranda, 1677–1708. Edited by W. G. Hiscock. Pp. ix+48. (Oxford: W. G. Hiscock, Conway, Squitchey Lane, 1937.) 10*s*.

THIS is one of the MSS. of David Gregory, preserved at Christ Church, Oxford, accompanied by some brief notes of the editor, Mr. Hiscock, who seems to have done them very well. The interest of this publication centres around the name of Newton. It is only by making available the views of his contemporaries that we can realize Newton. To print an account is very much the most effective way of making it available. If a thing is written down, it remains, and if it is printed, many people read it. Their views, even if diverse, and even if negligently formed, congeal about something common to all. It may be compared with the short issue of Stukeley's account, recently reviewed in NATURE (138, 617; 1936).

Reading the book through, one finds many differences from modern practice. One realizes, for example, that anti-Christ was a real person to them, and that they knew nothing at all about chemistry, and had not the means to produce any high temperatures, otherwise than by burning glasses. Newton was, in fact, the first of the moderns; he understood exactly the basis our conventions rest upon. We owe to him very much more than is usually ascribed; we owe him the whole direction of modern investigation.

The present transcript consists of personal notes about all sorts of subjects, most of them dated, for the use of David Gregory. Gregory's relations with Newton are well known, and they seem to have suffered from no cloud. Newton does not directly figure in these memoirs, but there are many references to him, and some important ones —one, for example, that Mr. Hiscock considers so important that he has photographed it and produced it as a frontispiece. It serves to emphasize Newton's conception of matter; it relates to the question of matter being proportional to weight. To quote two statements that strike us, from the text: "3 March 1698/9 . . . And its as universally received in England that the winters are milder as it is that the summers are colder" and "May 1708. Algebra is the Analysis of the Bunglers in Mathematicks. Sir Isaac Newton".

R. A. S.