

OUR BOOKSHELF.

Our Weather. By J. S. Fowler and William Marriott. (The Temple Primers.) Pp. xi+131. (London: J. M. Dent and Sons, Ltd., 1912.) Price 1s. net.

This book belongs to a series of small volumes intended to form introductions to the subjects of which they treat. Into its 120 pages Messrs. Fowler and Marriott have compressed a great deal of useful information. After a brief introductory chapter explaining why a popular book about weather is a practical necessity, they discuss in turn pressure, temperature, humidity, wind, and allied phenomena. They then deal with weather-forecasting, the upper air, and phenological observations, and conclude with a chapter on proverbs and rhymes.

The book is very readable, and the authors have carefully refrained from explanations or reasoning which might puzzle or bore the uninitiated reader. There are, however, a few points to which it may be useful to direct attention. The chapter on pressure contains a table showing the heights at which pressures of 29, 28, . . . 21 inches are reached when the pressure at sea-level is 30 inches, but the temperature with which the values correspond is not stated, nor is there any indication to the reader that temperature affects the results. In connection with the curve of annual variation of temperature, it is stated that the most noticeable irregularities are the cold days about the middle of May, and the warm spell at the end of November, but a reference to the curve shows that only the slightest irregularities occur in May. The most marked feature is the cold period in the second and third weeks of June, which is also mentioned by Hann as the general outstanding irregularity in the annual variation of temperature in Europe.

Months of unequal length are a general source of trouble in meteorological statistics, and the authors repeat the common mistake of including February with March as the driest of the twelve months at Greenwich, although the daily rainfall in the former month is greater than in April. In connection with forecasting, the statement that the information received by telegram is plotted on two maps, one for pressure and wind, and one for temperature and weather, is erroneous: the information is plotted on one working chart.

E. G.

Philips' Comparative Series of Wall Atlases. Edited by J. F. Unstead and E. G. R. Taylor. *Europe.* 8 maps. (Mounted complete as a wall atlas, on cloth, with roller.) Price 21s. Explanatory Handbook (to accompany the above). Pp. 16. Price 6d. net. (London: G. Philip and Son, Ltd.; Liverpool: Philip, Son, and Nephew, Ltd., 1912.)

THIS series of maps should prove of great service to teachers of regional geography, as they show political conditions, railways and configuration, climate, density of population, and economic conditions. The map showing communications illustrates admirably the influence of mountain

ranges, passes, and river valleys on transport. It is generally complete, though for some reason the Algerian railways have been omitted. The Density of Population is a graphic map with sufficient detail for the comparison of regions with one another. Used with the other maps, it should help to indicate the dependence of population on manufacturing areas, railway lines, river valleys and lowlands, and the comparative isolation of mountain areas, tundra, and desert. Unfortunately, this comparison is not possible in Africa and Asia, as the map stops short at the boundaries of Europe.

The climate maps show winter and summer conditions of temperature, pressure, winds, and rainfall. Actual temperature conditions are not shown, but the orographical features are printed on the map of summer and winter lines of temperature, so that reference can be made to real temperatures by allowing for elevation at any particular place or along any given line of temperature. Detailed maps of actual temperature must, like detailed orographical maps, be very complex, but we cannot help regretting that some simple maps of this kind have not been added to the series for summer and winter, with perhaps only a few selected lines of critical temperatures, as their value is incontestable as a means of comparison between regions.

On the whole, we have nothing but praise for this series, which affords most valuable material for the study of regional geography. The textbook which accompanies the maps points out clearly the general way in which they may be used.

The Fauna of British India, including Ceylon and Burma. Edited by Dr. A. E. Shipley, F.R.S. Assisted by Guy A. K. Marshall.—*Coleoptera.* General Introduction and Cicindelidæ and Paussidæ. By Dr. W. W. Fowler. Pp. xx+529. (London: Taylor and Francis; Calcutta: Thacker, Spink and Co.; Bombay: Thacker and Co., Ltd.; Berlin: R. Friedländer & Sohn, 1912.) Price 20s.

THE volume before us differs somewhat in plan from most of those which have preceded it. The first half (up to p. 218) consists of a very elaborate introduction to the Coleoptera, giving a detailed account of the whole series of families (103, exclusive of Strepsiptera) recognised by the author in the order, whether represented in the Indian region or not. The "Abnormal Coleoptera: Strepsiptera or Stylopidae," incidentally alluded to, are not yet proved to be Indian. We may point out that it was Kirby, the original discoverer of these insects, who proposed to make them a separate order (Strepsiptera), and Westwood merely followed him.

The two families of beetles dealt with in the latter half of this volume are specially interesting: the beautiful and active Cicindelidæ, or tiger beetles, and the Paussidæ, which are remarkable for the curious structure of their antennæ, and also for their habits, several species being found in ants' nests, and detonating like the well-known bombardier beetles (*Brachinus*).