

only incidental connexions with extra-terrestrial phenomena. The book is a contribution of exceptional value to the compilation-literature of science. It opens with an admirably comprehensive and concise account (86 pages) of auroræ, by C. Størmer, which is beautifully illustrated. Then follow two articles on special aspects of the penetrating radiation, namely, the barometer effect and the absorption coefficient, by W. Kolhörster and L. Tuwim; an account of atmospheric ozone, by P. Götz, and of abnormal sound-propagation in the atmosphere, by P. Duckert; and articles on geodesy, by F. Hopfner, and upon waves in air, water, and on sand, by F. M. Exner. The book is well bound and well printed, but its high price is regrettable.

(2) and (3) The present undue costliness of books published in Germany is emphasised by the other two books here noticed; they deal with substantially the same subject, and with about equal authority. The English book, unlike the German one, is bound, and is printed on equally good paper; it is in slightly smaller type, but contains about 25 per cent more words than the other; its price, even apart from the depreciation of sterling, is about half that of the German book.

Schonland's book gives an admirable short review of the electrical phenomena of the lower atmosphere, up to 10-15 km., and includes a chapter on the penetrating radiation. Schweidler limits his account to one special (but central) problem of atmospheric electricity, the maintenance of the earth's charge; he is more diffuse than Schonland, and while the latter does not cover every topic discussed by Schweidler, his book is undoubtedly the better introduction to the subject.

*Blackboard Coloured Diagrams: Biological Series.*

*Rana temporaria* (The Common Frog). 44 in. × 31 in. *Rana temporaria* (Skeleton). 44 in. × 31 in. *Rana temporaria* (Brain and Nervous System). 44 in. × 31 in. (London: Sidgwick and Jackson, Ltd., 1933.) Mounted on cloth, eyeletted, 10s. 6d. each.

THESE diagrams are printed upon a black background as if drawn upon a blackboard and the actual area covered by the illustrations is 40 in. × 29 in. on each sheet. No names or key letters are provided and this is in some ways an advantage since it allows the instructor to give as many or as few technical names as may be thought desirable and enables them to be used for questioning. From their size they are adapted for use with small classes, say up to 50 but not to large lecture theatres accommodating 200-300 students. Even then, some of the smaller drawings, as, for example, the end-on view of the atlas vertebra and the diagram of the relationship of the dorsal and ventral nerve roots to the skin and a piece of muscle, are so small that they could only be seen properly in the front rows and would need to be examined at closer range by the students.

The diagrams are not all of the same standard. That of the skeleton is the best and reaches a high standard. The general illustration of the viscera is not quite so good nor is that of the nervous system, even allowing for the fact that they are not such satisfactory subjects for treating in this manner as a skeleton. In the former, some of the viscera are rather 'wooden' in appearance, for example, the fat bodies, and in the latter the general drawing of the nervous system is much like that of Ecker, which is very diagrammatic and exhibits an arrangement of the sympathetic nerves unlike that seen in ordinary dissection. Apart from these relatively minor points, the diagrams are well drawn and executed and should prove useful in schools and institutions where the classes are not large.

*Reports of the Progress of Applied Chemistry.*  
Vol. 17, 1932. Pp. 728. (London: Society of Chemical Industry, 1933.) 12s. 6d.; to Members, 7s. 6d.

The volume of reports on the progress of applied chemistry during 1932 has appeared with customary promptitude and again reaches a high standard. This annual publication is one which few progressive chemists neglect to study. Many regard it as among the most useful books in their own libraries, and none can afford to ignore it. Moreover, dealing as it does with the general outline of progress in the various chemical industries and of industries in which chemistry enters as an aid to control and development, as well as describing very many of the more important technicalities underlying present and future progress, it appeals to the interest of the non-technical man who desires to keep *au fait* with the march of events in extremely important branches of the world's work.

The reports are presented in familiar form, are fully annotated with references to original papers and summaries to be found in "British Chemical Abstracts", and are provided with name and subject indexes. The report on explosives covers the years 1931 and 1932, and that which formerly dealt with fibres, textiles, cellulose and paper has been expanded into two separate reports. A. A. E.

*Wanderers Wetterbuch: Einführung in das Verständnis der Wettervorgänge.* Von Dr. Otto Myrbach. Pp. vi+184. (Leipzig: Verlag Berg und Buch, n.d.) n.p.

To anyone with a love of Nature and a moderate knowledge of German, this book should make a definite appeal. The reader is introduced step by step to the elements of weather, the movements of air masses, clouds, rain and fine weather. Official forecasts and their application to local conditions are explained and this chapter is supplemented by one on local weather signs, but the largest and most interesting part of the book deals with weather in the mountains, ending with a four-act drama of a storm on the Zugspitze.