

*The Medicinal and Poisonous Plants of Southern Africa: Being an Account of their Medicinal Uses, Chemical Composition, Pharmacological Effects and Toxicology in Man and Animal.* By Prof. John Mitchell Watt and Dr. Maria Gerdinga Breyer-Brandwijk. Pp. xx+314+25 plates. (Edinburgh: E. and S. Livingstone, 1932.) 25s. net.

THIS work should be of special value to all those in any way interested in the plants of southern Africa and their curative and toxic properties—to both man and beast. Considerable advance has been made in South Africa in recent years in the study of poisonous and medicinal plants, but the literature is for the most part scattered and the need of a general reference work has long been felt. The authors have themselves contributed in no small measure to the advancement of the knowledge of these plants from the pharmacological point of view, and their excellently compiled volume will no doubt be accepted as the standard work on the subject. The authors appear to have worked in close liaison with the technical staffs of certain State Departments in South Africa and the good work that has been done on vegetable poisons in the veterinary field is included in annotated form in the pages of the book. It is pleasing to observe that special care has been taken in securing accuracy of identity of the species they have themselves investigated. Acknowledgment is made in the introduction to the staff of the Division of Plant Industry for having determined more than 2,500 specimens.

The plants dealt with are placed under their respective families and these are arranged according to the natural system, a chapter being devoted to each family. In the list of contents at the commencement of the volume the salient features of the more important plants are indicated. This, combined with the full indexes of botanical names, active principles, European and native names that are included, renders the volume easy for reference. References to literature are freely quoted. Very little of what has already been published appears to have escaped the scrutiny of the authors, and the work contains in addition a mass of generally interesting information that is new or hitherto unrecorded.

*Wireless.* By W. H. Eccles. (The Home University Library of Modern Knowledge.) Pp. 256. (London: Thornton Butterworth, Ltd., 1933.) 2s. 6d. net.

It is doubtful whether the historical method, with citations of patent numbers, is now really appropriate to the development of 'wireless' before a "Home University" audience, but Dr. Eccles almost persuades us that the method is, after all, the right one. He recovers the excitements of that headlong progress which made the decade centred about 1918 a miniature Augustan age for radio engineering, and led to the foundation of an industry which has since resisted, more success-

fully than most others, the slings and arrows of economic disturbance. The most serious criticism of the book is that it makes the whole complex business look too easy; there is a dangerously disarming air of simplicity about the first chapter that will probably lead many readers to suppose that they 'understand wireless'. They will find themselves increasingly doubtful as they go on, for the *tempo* accelerates until the later chapters have not infrequent elements of real unclarity.

Apart from under-statement of the pitfalls and difficulties, however, the author is generally a safe as well as a persuasive guide. This is not to say that "Machrihamish" will be found in any map of western Scotland, or that a five-fold over-statement of the height of the mountain of water between these islands and New York is excusable. His derivation of bels and decibels is neither orthodox nor logical, his use of the term billion for  $10^9$  is unconventional, and his invention of the "controllode" is less happy than his invention of the "triode" and its successors. But these are not essentials, and in essentials the book is cordially to be commended as a worthy member of a fine series, and as very good value indeed for the modest price asked.

*Underground South Eastern England: a Three Dimensional Geological Map.* By L. J. Chubb. (London: Thomas Murby and Co., 1933.) In sheets to be made up, 12s. 6d.; Card for base and 25 lengths of gummed linen for binding, 2s.; Cut out and made up, 35s.

IN this model, which is likely to prove useful to the student and to the practical geologist, the author has adopted an ingenious method of showing the extent and the order of superposition of the geological formations under east and south-east England. The outcrop of each formation is represented on a separate, coloured, map: the Palæozoic floor forms the base of the model, the successive formation-maps being attached either by their right or left margins. The thicknesses of the beds, as proved in boreholes, are indicated at a number of sites. By these means the unconformities at the base of the Jurassic and the Cretaceous systems, the regression of the Inferior Oolite, and the overlap of the several members of the Cretaceous system, are clearly brought out.

Although the scale is small (1 in. to 10 miles) some useful preliminary information with regard to depths to water-bearing strata over the whole area, and to the coal measures of the Kent Coal-field, can be obtained by the engineering geologist, and as the colours adopted are those used on the published maps of the Geological Survey, more detailed information is readily obtainable.

The utility of the model would be enhanced by the inclusion of a topographical map printed on a 'flimsy' which could be applied to each formation. A few vertical sections would help the student to visualise the structure of the strata. H. D.