

of self-determination, which does not easily fit into the traditional interpretation of Nature.

*Entomology: with Special Reference to its Ecological Aspects.* By Prof. J. W. Folsom. Third revised edition. Pp. vii+502. (London: John Murray, 1923.) 21s. net.

PROF. FOLSOM'S well-known text-book gives a clear and concise account of the various aspects of entomology, and is written with the object of meeting the growing demand for a biological treatment of the subject. The present (third) edition includes a considerable amount of new letterpress, with the addition of an opportune chapter on insect ecology, and some 250 titles have been added to the bibliography. Considering the limited size of the book (500 pp.), the author has been remarkably successful in dealing with his subject in a comprehensive manner. An elementary treatment is, of course, only possible within this compass. Entomology, like other branches of science, has made such rapid strides during the last twelve years or so, that it is almost impossible to compress a really adequate work into less than 800 or 900 closely printed pages. There is a great need at the present time for a more advanced book, since works of an elementary nature are tolerably numerous. Among the latter, Prof. Folsom's book is undoubtedly one of the best. The author's admirably terse and lucid style is of great value to the beginner, while the up-to-date bibliography, that is appended at the end, serves as a guide to the sources where fuller information is obtainable.

*How to Build Amateur Valve Stations.* By P. R. Coursey. Pp. 70. (London: The Wireless Press, Ltd.; New York: The Wireless Press, Inc., 1923.) 1s. 6d. net.

WE can recommend this book to all who want to take advantage of the latest developments of radio telephony. The author is equally at home on the scientific as well as on the practical side of the art, and experts attach weight to his views.

The very simple sets described can be trusted to work admirably on days when the electrical condition of the atmosphere is not very disturbed. A set for use in Great Britain should have a tuning range from 300 up to 2700 metres. This would include the Eiffel Tower time signals, which are usually made on a wave length of 2600 metres, the French "radiola" concerts, which are sent on a wave-length of 1500 metres, the Hague concerts on 1050 metres, the French concerts from "l'École des Postes et Télégraphes" on 450 metres, and the British concerts broadcasted on wave-lengths varying between 350 and 425 metres. Careful and accurate descriptions are given of the components of valve receiving sets, the diagrams can be read at a glance, and the many useful practical hints will be welcomed by amateurs.

*Labyrinth and Equilibrium.* By Prof. S. S. Maxwell. (Monographs on Experimental Biology.) Pp. 163. (Philadelphia and London: J. B. Lippincott Co., 1923.) 10s. 6d. net.

MANY different views have been held as to the respective functions of the ampullæ, otoliths, and other constituent parts of the internal ear, and any fresh evidence

on the subject must be welcome to physiologists. Prof. Maxwell seems to have attained a high degree of accuracy in his experimental methods, especially in dealing with the otoliths. He shows, for example, that compensatory movements to rotations around the longitudinal and transverse axes continue so long as the otolith of the recessus utriculi remains uninjured. He further shows, in the case of the ray, by mechanical pressure upon the otolith in different directions, that it is the displacement of the otolith and not its own pressure which is the actual stimulus, and that it is the direction of the displacement which determines the direction of the compensatory movement. Unfortunately, his experiments leave us completely in the dark as to the reason for the existence of the three semicircular canals and their highly characteristic orientation.

*Radioactivity and the Latest Developments in the Study of the Chemical Elements.* By Prof. K. Fajans. Translated from the fourth German edition by T. S. Wheeler and W. G. King. Pp. xvi+138. (London: Methuen and Co., Ltd., 1923.) 8s. 6d. net.

PROF. FAJAN'S book is particularly addressed to chemists, and it gives in a very readable form the important developments in the study of radioactivity, isotopes, atomic numbers, and the structure of the atom which have been made in recent years. The subjects are dealt with briefly, but in a very authoritative manner, and chemical students will find the book of great interest and value. There are references to the literature and an index. The book is well printed and illustrated. One might have wished for a little more detail of experimental methods (e.g. in connexion with Moseley's work, which is not described, whereas Aston's apparatus is figured and explained), but in the limits of his space the author has generally made a wise choice of material. The numerical constants in the tables of radioactive series (pp. 21-23) in some cases differ slightly from those adopted in the Report of the International Commission on the Elements (1923).

*Geometry Practical and Theoretical, Pari Passu.* By V. Le Neve Foster. In 3 vols. Vol. 3: Solid Geometry. (Bell's Mathematical Series for Schools and Colleges.) Pp. xiv+423-585+viii. (London: G. Bell and Sons, Ltd., 1922.) 3s. 6d.

THIS is the third part of a work of which we have already noticed the first and second parts (NATURE, June 10, 1922, vol. 109, p. 737). Mr. Foster continues to combine the theoretical with the practical, and added interest is obtained by historical references. The scope of the book is indicated by the fact that it deals with parallelepipeds and tetrahedra, lines and planes, gradients, regular solids, and the sphere. There are chapters on the mensuration of prisms, pyramids, and spheres, as well as on solid angles and Euler's theorem. A concluding chapter on the earth is particularly useful and instructive.

We like this volume very much, and think it makes a most useful and pleasant addition to the available elementary literature on solid geometry. S. B.