

Our Bookshelf.

Elementary Practical Biochemistry. By Prof. W. A. Osborne. Pp. v+184. (Melbourne: W. Ramsay, 1920.)

THIS book represents the course of elementary instruction in practical biochemistry which the author has found suitable for large classes. The conception of biochemistry is, however, limited to the chemistry of the animal body, so that the title may prove misleading. The work actually comprises a course of elementary physiological chemistry, and is divided into twenty-six lessons, each representing a period of laboratory work. A short statement on the theory of the subject of the exercise is given, followed by directions for the practical work. The latter is almost wholly qualitative in nature, and consists of the usual test-tube experiments on the properties of the chief constituents of the animal body. This mode of treatment is always open to the criticism that the theoretical discussions are too short to be of real value, and it is, indeed, difficult to imagine that the small amount of space allotted, *e.g.*, to the carbohydrates will be of much teaching value. On the other hand, they serve a useful purpose in refreshing the student's memory, so that the tests are more intelligently performed.

We note that the author still uses the term "lipoid," and includes the sterols under this head, in spite of the recent suggestion for the abolition of this term. The question of hydrogen-ion concentration is not touched upon, and this constitutes a serious defect, as this conception is of great importance, even for elementary students, and the work on ferments, proteins, and colloids suffers greatly from its omission.

Dietetics receives a good share of attention, and a useful appendix is given containing an elaborate table of food values. Within the limitations of the author's scheme the treatment is quite adequate, but it is to be regretted that more attention is not paid to quantitative and preparative work. A. H.

Monograph of the Lacertidae. By Dr. George Albert Boulenger. Vol. i. Pp. x+352. (London: British Museum (Natural History), 1920.) Price 2l.

THIS volume comprises only forty species, but it contains the important genus *Lacerta*, and this has been submitted to an intensive study of the individual variations of the species and their many varieties. The author rightly calls the available material unique in its vastness, and we may add, to his untiring, purposeful exertions during the many years he has been in charge of the cold-blooded vertebrates in the national collection. He deemed it important to ascertain the extent of variation of which a given form is susceptible and in what direction a given variation trends, and then to decide what characters have been modified, or lost, and what new ones produced.

The way in which certain combinations of

orthogenetic and adaptive modifications have, by their recurrence, led to various parallel series is of prime importance. Ten characters, mostly concerning the scaling, have been selected to show from what each has arisen, whither it trends, and how the resulting combinations have produced thereby those recognisable varieties of the several species, and then in turn the genera, which have been evolved from the more central or older genus *Lacerta*. To trace all this required immense study of the numerical variations in the *Lepidosis*, as attested by the tens of thousands of measurements.

Lastly, "if the interpretation of these evolutionary series of lizards is at all sound, a step will have been made in the advance of our knowledge, and a more rational basis laid down for the discussion of the probable mode of geographical dispersion of the genera, species, and varieties."

The Centenary Volume of Charles Griffin and Co., Ltd., Publishers, 1820-1920. With Foreword by Lord Moulton. Pp. xx+290+plates. (London: Charles Griffin and Co., Ltd., 1920.)

As a member of the council of trustees of a public library, the present writer has often smiled when the name of Messrs. Charles Griffin and Co. has been accepted as the guarantee of a book rather than that of the less known but aspiring author. He well remembers an interview with Miss Elizabeth Eaves Griffin, who selected him, after the manner recorded on p. 8 of this memorial volume, to prepare a very dry and formal text-book, because she had read a sketch of midnight travel written by him in a school magazine. No wonder, then, that he joins with many others in applauding the perspicacity of the firm. It was a happy thought to bring together its history, told by writers who understand what scientific progress means. Prof. Beare thus deals with engineering, Sir W. Abell with naval architecture, Prof. Gowland with metallurgy, and Prof. Louis with mining. In each case the works published in Exeter Street are mentioned in connection with researches and technological developments that have affected the world at large, and the excellent portraits of authors, such as those of Sir W. Roberts-Austen, Sir Edward Reed, and Mr. Alfred Brothers, are a pleasing record in themselves. The founders and directors of the house are also happily represented, and Mr. F. J. Blight is revealed to us in a welcome moment when he is not called upon to write his well-known signature. The book rightly characterises many of the works issued as "pioneers." It is edited with as much good taste as is shown in its technical production.

Rudiments of Electrical Engineering. By Philip Kemp. Pp. viii+255. (London: Macmillan and Co., Ltd., 1920.) Price 6s.

THIS book is intended for those with practically no electrical knowledge, but whose daily work brings them into touch with electrical apparatus. The recent rush of students to join classes in elementary electrical engineering in technical