The entire treatment of electric and magnetic theory is given in terms of a single system of units instead of three systems. This system, the rationalised practical system, has been freed of the 'irrational' π factors and of the multiplicity of troublesome conversion factors by three expedients: (1) By using the ampere turn and the ampere turn per cm. as the units of magnetomotive force and of magnetic intensity respectively; (2) by using the weber and the weber per sq. cm. as the units of magnetic flux (induction) and of magnetic flux density; (3) by assigning to the permittivity, p_0, of free space such a value that Coulomb's law becomes

$$f = \frac{q_1 q_2}{4\pi p l^2},$$

where f is measured in *dyne-sevens* (10^7 dynes), q_1 and q_2 are in coulombs, and p is the permittivity of the medium in which the charges are immersed. The value of p_0 in free space is taken as $8{\cdot}85 \times 10^{-14}$. Accepting this notation, we can say that the book is well and clearly written. It contains many useful examples, and several of the methods of discussing well-known theorems are novel and instructive.

Recent Advances in Physiology. By Prof. C. Lovatt Evans. Second edition. Pp. xiii + 370. (London: J. and A. Churchill, 1926.) 12*s.* 6*d.* net.

THE appearance of the second edition of this little volume within a few months of the first speaks well for its reception. It is, in fact, an excellent presentment of our knowledge of certain selected aspects of physiology. The author describes it as an "Elementary Text-book of Advanced Physiology"; but we feel sure that most of the chapters could be read with profit by the average medical student. The author has seized the opportunity presented by the need for a second edition to bring the book right up-to-date. Thus Harington's work on the structure of thyroxin, the active principle of the thyroid gland, is referred to, and a short but adequate account is given of the effect of insulin upon the normal organism. In this connexion the work of Best, Dale, Hoet, and Marks is mentioned. These authors have been able to show that the sugar which disappears from the blood under the action of insulin can be completely accounted for, either by combustion or by conversion into glycogen in the muscles.

Perhaps the two most useful chapters are that on the mechanism of postural reflexes and the functions of the labyrinth, in which an account is given of the work of Magnus, and the one on conditioned reflexes, describing the methods of research and the results obtained by the Russian physiologist, Pavlov. In neither case is there any adequate summary of this most important work extant in the English tongue. Perhaps the least satisfactory chapter is that on the physical aspects of the physiology of muscular contraction, which might be made clearer by a fuller description of elementary principles. On the other hand, the author is quite at home in the chapters on the blood, especially in that dealing with its reaction. Altogether, this is a most interesting book, and can be thoroughly recommended to all interested in the subject of physiology.

Die Enzyme: Wirkungen und Eigenschaften. Von Ernst Waldschmidt-Leitz. (Die Wissenschaft: Sammlung von Einzeldarstellungen aus den Gebieten der Naturwissenschaften und der Technik, Band 76.) Pp. xvi + 233. (Braunschweig: Friedr. Vieweg und Sohn A.-G., 1926.) 14 gold marks.

THE object of the author of this short and excellent account of the enzymes is to illustrate the general principles of enzyme action and the results of recent work on the separation and the partial purification of enzymes by a series of examples, rather than to attempt a complete account of the subject. Accordingly the first hundred pages deal with general matters, the remainder of the book being devoted to a brief consideration of the various groups of enzymes.

The close association of the author with the recent work of Willstätter (to whom the book is dedicated) adds interest and authority to his fascinating account of the methods of preparative enzyme chemistry. The quantitative measurement of enzyme action is here seen to be essential for all true progress in our knowledge of the nature of enzymes. On this fundamental question the author supports the conception of Willstätter that enzymes are definite and separable chemical individuals, probably consisting of a colloidal 'carrier' and a specifically active group.

The book is written in a clear and interesting manner, is well up-to-date, and is provided with a good index and sufficient references. A. H.

Soil Characteristics: a Field and Laboratory Guide. By Prof. Paul Emerson. Pp. x + 222. (New York: McGraw-Hill Book Co., Inc.; London: McGraw-Hill Publishing Co., Ltd., 1925.) 12*s.* 6*d.* net.

METHODS of soil investigation are now so numerous and varied that a volume including some description of the more important of these fills a definite gap. The features of special soil types are not dealt with, but as a preliminary the procedures adopted in soil surveying and sampling are outlined, together with methods of classification and mechanical analyses. Analytical methods for the determination of various soil constituents are given in detail, special attention being devoted to the preparation of equipment. The physics and biology of the soil are not dealt with so fully, but sufficient is given to direct the attention of the student to the main aspects of the problems involved.

The bibliographies are conveniently placed at the end of the various sections, but consist mainly of references to American papers. Numerous laboratory experiments are suggested and outlined wherever possible, with the intention of supplying training on a good working basis for the determination of the characteristics of whatever soils may come under consideration.