

figures have been added. As a result, the value of the book has been considerably enhanced, and in its new form it is undoubtedly the most exhaustive treatise on structural geology in the English language.

The subject is treated from a descriptive and analytical point of view and there is a conspicuous absence of the confusing mass of theory and hypothesis with which the literature of tectonics is so overburdened. The descriptive portion of the book is preceded by a discussion of the fundamental mechanical principles involved in the deformation of rock masses. The description of each type of structure (folding, faulting, etc.) is followed directly by a detailed analysis of the stresses and strains involved in its production.

New chapters have been added on "The Physiographic Expression of Structure" and on "Practical Problems", while the section dealing with the wider problems of earth dynamics has been completely rewritten and affords an excellent account of modern views concerning the nature, age, constitution and physical and thermal state of the earth.

Although the book is of a detailed and systematic nature it is equally suited to the needs of the elementary student and the advanced worker, since the purely descriptive and the analytical sections respectively are treated separately, as indicated in the table of contents.

*A Hundred Years of Psychology, 1833-1933.* By Prof. J. C. Flugel. (100 Years Series.) Pp. 384. (London: Gerald Duckworth and Co., Ltd., 1933.) 15s. net.

THIS important book fills a very obvious gap in psychological literature, and will serve for many years as the most useful outline, although in no way sketchy, of psychology during its period of most energetic development.

The author begins by giving a vivid picture of the position a hundred years ago, when Herbart's works had laid the foundation of psychology as a subject in its own right. The next part surveys the period up to 1860, showing the rise of systematic, physiological and abnormal psychology. During the next period, that is, up to 1900, the influence of the theory of evolution was felt, and psychology was applied to problems of the individual, the child and the animals; a period that experienced the activities of Spencer, Galton, Wm. James, Fechner, Helmholtz, Wundt, Chareot and Ribot, to mention only a few names, was clearly one of rapid development.

During the last thirty-three years there has been a tendency for schools to develop, each probably feeling much more in opposition to the others than will later prove to be the case. The most outstanding characteristic of this period has been the fruitful application of psychology to education, industry and medicine.

Unlike so many shorter histories, this book is interestingly written and should be read by all students of psychology, who will gain much from seeing their own speciality in perspective and treated in an unbiased way.

*Geometrische Elektronenoptik: Grundlagen und Anwendungen.* Von E. Brüche und O. Scherzer. Pp. xii+332. (Berlin: Julius Springer, 1934.) 28.40 gold marks.

ELECTRONS behave in many respects like light. They may travel in straight lines; may be 'refracted' in electric or magnetic fields, may be focused as by a lens in suitably graded fields, or may be caused to produce interference patterns in properly disposed apparatus. These are the matters which the authors of this book have chosen for their topic, and which they have elaborated with most praiseworthy attention to detail and extreme completeness of reference.

Almost exactly the first half of the volume (164 pages) is devoted to the more mathematical and theoretical parts of the subject, while the second half (165 pages) is concerned with the more practical applications. Commencing with the formal analogy between light waves and electrons, the authors proceed in logical manner to develop the theory of the motion of electrons in electric and magnetic fields, including a very complete mathematical discussion of 'electron lenses'. The experimental side of the subject is always kept in view.

In the second half of the book the development of the original Braun tube to the present-day cathode ray oscillograph is first detailed, followed by a long chapter on the 'electron microscope'. A very interesting set of comparison photographs of the same objects taken through the ordinary light microscope and the new electron microscope allow the reader to form his own conclusions about the present state of the new technique in relation to the old.

*Herbert Spencer's Sociology: a Study in the History of Social Theory, to which is appended a Bibliography of Spencer and his Work.* By Dr. J. Rumney. (Herbert Spencer's "Descriptive Sociology", continued by his Trustees.) (Published for Herbert Spencer's Trustees.) Pp. xvi+357. (London: Williams and Norgate, Ltd., 1934.) 10s. 6d. net.

THE winding-up of the trust created under the will of Herbert Spencer for the publication of sociological material relating to the less advanced societies has been fittingly marked by the Trustees in the publication of this account of Herbert Spencer's sociological work. Dr. Rumney, to whom they entrusted the task, has wisely not confined himself to a summary of Spencer's theories, but has analysed them critically in the light of modern developments in theory and method.

Spencer has not received a very cordial welcome in academic circles, and it will perhaps come as a surprise to many who have not an extensive acquaintance at first hand with his writings to find how well they stand the test. Dr. Rumney finds the main ground of criticism in the attention given to structure rather than function and in the neglect of modern or civilised societies in favour of primitive or archaic forms. The explanation of the latter failing, as he points out, is that in the days in which Spencer was working it was erroneously believed that the 'savage' society is the simpler—a fallacy exposed by modern research.