

the molal composition of the cryohydrates on page 116), but they are not of such importance as to lessen the value of the book.

W. BÖTTGER.

GRUNDZÜGE DER SIDEROLOGIE. VON HANNS FREIHERR VON JÜPTNER, Professor an der K. K. technischen Hochschule in Wien. Dritter Teil, zweite Abtheilung: Die hüttenmännischen Prozesse. 1904. Leipzig: Verlag von Arthur Felix. xi + 274 pp. Price, 9 marks.

That a book so comprehensive, so thorough, so modern in its views, should have been completed in so short a time is remarkable. All metallurgists and scientists interested in the properties of iron will welcome its completion, not only as a valuable reference book, but for the clear exposition of the whole subject. The application of the laws of physical chemistry to the iron and steel problems by one so competent to deal with the subject is a great step forward in industrial science.

The present volume completes the work on Siderologie, the previous parts of which have been reviewed in these columns. It treats of the thermal and chemical reactions of the blast-furnace, the production of malleable and puddled iron; and the various steel processes.

HENRY FAY.

THE BECQUEREL RAYS AND THE PROPERTIES OF RADIUM. BY HON. R. J. STRUTT, Fellow of Trinity College, Cambridge. London: Edward Arnold. 1904. 214 pp. Price, 8s. 6d. net.

In response to the general demand for information regarding radioactivity, a large number of treatises have appeared, but knowledge has increased so rapidly that many of these books now fail to adequately represent the present status of the subject. This work brings the subject up to about the middle of the year 1904. The author, who has himself made valuable contributions to our knowledge of radioactivity, has, in this case, written for the general reader. He has entirely avoided mathematical treatment and has assumed but the minimum of scientific attainment on the part of the reader. Nevertheless the book is thoroughly scientific and the statements are, in general, as rigid and accurate as non-mathematical language will allow. There are no references to the original literature. The first chapter deals with the electric discharge in high vacua and the properties of the cathode rays. The next six chapters treat of the most important phenomena of radioactive substances, including also the earth, air and common bodies. The final chapter considers the electrical theory