accidents. There are five chapters, covering embrittlement by interstitial atoms, intergranular brittleness, brittleness associated with high and low temperatures, a review of the theory, stress concentration and residual stress, and methods of investigation. Each chapter and most important sections of chapters have a bibliography, but there is no index.

Orbitals in atoms and molecules. By C. K. JØRGENSEN. Pp. vii+162. London: Academic Press, 1962. Price 35/–.

This book is concerned with the relationship between many-electron systems in atomic spectroscopy and in polyatomic molecules. There is one chapter (16 pages) on energy levels of crystals, and another (3 pages) on X-ray spectra, but on the whole it does not contain sufficient material of interest to crystallographers to justify an extended review. There are numerous references to the original literature, which enhance the value of the book.

The application of organic bases in analytical chemistry. By E. A. OSTROUMOV, translated from the Russian by D. A. PATERSON. Pp. xxv+159. Oxford: Pergamon Press, 1962. Price 50/–.

This book contains very detailed experimental descriptions of the use of pyridine, α-picoline and hexamethylenetetramine for the identification of metal ions in solution and for the separation of metals. Some use is made of Debye–Scherrer methods in the analysis of precipitates. The book is reproduced photographically from unjustified typescript, and there is no index.

Handbook of statistical tables. By D. B. OWEN. Pp. xii+580. Reading, Massachusetts: Addison–Wesley, 1962. Price 70/–.

This collection of tables for statistical use is intended for three audiences: the student of the subject, the practising statistician, and the research worker. An effort has been made to include tables not ordinarily found in textbooks or other compilations, with the result that some tables of important functions are more compressed than usual, in order to leave room for rarer functions. Even the shorter tables, however, are sufficient for use in connection with teaching courses in statistics. The references, on the whole, are to recent works with full bibliographies, rather than to the primary papers. In order to reduce possibilities of error, most of the tables are reproduced directly from computer output, and many of them have been calculated specially for use in this volume. Some of the less usual tables included deal with non-parametric tolerance limits and non-parametric analysis of variance, Wilcoxon tests, Kolmogorov–Smirnov statistics, and the hypergeometric distribution.

Traité de métallurgie structurale théorique et appliquée. By A. DE SY and J. VIDTS. Translated from the Flemish with the help of J.-C. MARGERIE. Pp. xvi+464. Paris: Dunod, 1962. Price 75 NF.

This is an elementary treatment of metallurgy, from a modern standpoint, intended primarily for engineering students. A few pages are devoted to the typical metal structures. There is no index, and no references to primary sources.

Beryllium. By A. A. BEUS. Translated by F. LACHMAN. Edited by L. R. PAGE, preliminary editing by R. K. HARRISON. Pp. x+161. London: W. H. FREEMAN, 1962. Price 36/–.

The Russian original of this book was published in 1956 with a title something like 'Beryllium — the evaluation of deposits in exploration and prospecting.' The main chapters deal with Occurrence, Minerals, Geochemistry, Deposits, Prospecting for and Evaluation of beryllium deposits. It is essentially a practical handbook, and will interest geologists and prospectors more than crystallographers.