also be drawn from a study of the electromotive force of alloys, but this is not a very reliable method. While the author mentions the measurement of conductivity as a means of studying alloys, this method is not at present of the slightest value. Among other methods are the determinations of densities and heats of formation. These last four methods, as well as Tammann's cooling-curve method, are not accurate enough to be of anything more than historical interest.

The section on solubility curves should be of interest to the general chemist, who ought also to read the chapter on polymorphism. While the essential characteristics of monotropic and enantiotropic substances were discussed under one-component systems, the behavior in solutions is, of course, treated in this number.

The author has brought in quantitative and qualitative relations throughout. It remains to be seen whether this is wise. We distinguish sharply between qualitative and quantitative analysis. Since the phase rule is essentially qualitative it seems to the reviewer that the subject can be treated more clearly by the application of the phase rule to qualitative equilibrium followed by the study of quantitative relations classified according to the phase rule. The answer to this, of course, is that no one has ever written a book in which quantitative equilibria were discussed according to the phase-rule classification and that most physical chemists do not know how it should be done.

WILDER D. BANCROFT.

THE ELECTRIC FURNACE. BY HENRI MOISSAN, Membre de l'Institut, Professor of Chemistry at the Sorbonne. Translated by A. T. DE MOUILPIED, B.Sc. (Lond.), M.Sc. (Vict.), Ph.D. Assistant Lecturer in Chemistry in the University of Liverpool. London: Edward Arnold. 1904. Octavo, xi+307 pp. Price, $2.75.

This is the second translation of Moissan's "Le Four Électrique", which has appeared in English within a year, each having a preface by the author. The present book contains 13 pages of matter not in Lenher's translation, including descriptions of the carbide of samarium, the silicides of vanadium and cerium, and the borides of silicon. The translator's English is smooth, and the presswork of the book is excellent. Unlike the Lenher translation, it has an index, but it lacks a bibliography. The necessity for a second translation of a work, which could hardly be expected to have more than a limited sale, is, however, not apparent.

JAS. LEWIS HOWE.