mate. Along the way such diverse and entertaining topics as the fate of the Donner Party, ice worms, frozen Norsemen at Herjolfsnes, the absence of snakes in Ireland, and the Abominable Snowman are discussed.

Dyson's style is personal, immediate, and lightly whimsical at times; even such familiar topics as the processes of mountain glaciation take on a new freshness when he writes about them. The author never confuses popularization with oversimplification, and a note of scientific caution pervades the book. Dogmatic assertions and personal axes are absent.

An excellent selection of photographs adds to the value of the book, which is also carefully indexed. An extensive and comprehensive bibliography cites standard works as well as the relevant current literature on ice.

For the layman who knows nothing about ice, this book opens up exciting vistas. For students in geology and geography, it will provide a valuable and fascinating introduction to the world of ice.

Dyson obviously enjoyed writing the book. By combining the best of a textbook with the appeal of a popular book, he has assured equal enjoyment for all who read it.

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Brief Overview

Inorganic Reactions and Structure. Edwin S. Gould. Holt, Rinehart, and Winston, New York, ed. 2, 1962. xiv + 513 pp. Illus. $6.50.

During the past 7 years the first edition of this book has been widely popular as an inorganic chemistry text, deservedly so, since at the time of its publication texts which provided a modern treatment of inorganic chemistry were rare indeed. The revised edition has therefore been awaited with interest, for in recent years several other texts, with different approaches to the subject, have been published.

The new edition of Gould's book, like the first, attempts to provide a survey covering all major aspects of modern inorganic chemistry. It is clearly impossible to accomplish this with any reasonable degree of thoroughness in a book of this size, for the large body of descriptive material that has recently become available and the background material that is needed to satisfactorily explain the many examples of the use of molecular spectroscopy and kinetics to determine the structure and reactions of inorganic compounds both require adequate space for presentation. Consequently, Gould's book provides the reader with only a superficial treatment of most aspects of the subject matter and of its allied disciplines, such as molecular spectroscopy, which he also discusses. In those educational establishments where only a half-year course is offered, more or less as lip service to the teaching of inorganic or physical-inorganic chemistry, the new edition could well be useful as a text. As such, it will demonstrate to students whose interests lie primarily in other areas of chemistry what, in general, the practice of inorganic chemistry consists of today, and it will familiarize them, on a conversational level, with the significant discoveries made in recent years. It is to be hoped, however, that the training of future professional chemists will include a more detailed survey of inorganic chemistry than this book provides. I believe teachers of inorganic chemistry should strive to introduce more inorganic and physical-inorganic chemistry into the curriculum. If the attempt is successful, or if fewer topics are to be covered in depth within the given period, other less cursory texts, including some recently published, are more suitable for use.

The revision, like its predecessor, provides extremely useful exercises at the end of each chapter. The bibliographies, also at the end of each chapter, have been expanded, reflecting the increased amount of reference material now available. The separate chapter on inorganic reaction mechanism is a valuable addition. There are a number of errors in some of the figures; among the more serious is the erroneous presentation of the structure of manganese carbonyl with bridging carbonyl groups (page 158). The correct structure, containing a metal-metal bond joining two octahedrally disposed $Mn(CO)_5$ groups in staggered conformation (D_{4d}) was determined by x-ray diffraction and reported in 1957 (Dahl, Ishishi, and Rundle). The structure containing bridging cyanide groups with three-center Ni·C·Ni bonds for $Ni_2(CN)_6^{4-}$ (page 402) is based on what are now believed to be unreliable x-ray data. Two groups of workers, El-Sayed and Sheline (1956) and Griffith and Wilkinson (1958), have presented other results in favor of the earlier proposed Mellor-Craig structure (nickel-nickel bond joining two square planar $Ni(CN)_3^{2-}$ groups).

Two other figures require comment, because they contain errors carried over from the first edition. Some qualifying remarks should have been included to explain the unusual representation of the copper (II) chelate of acetylacetone on page 344. The chelated form of this ligand is usually written without the hydroxylic proton, especially when a straight line rather than an arrow is used to connect that oxygen to the metal, and the complex should then also bear one less positive charge. Finally, the negative charges on the quadridentate molecule (IV) on page 341 are missing.

In spite of the foregoing criticism, the second edition of *Inorganic Reactions and Structure* provides its reader with a glimpse of modern inorganic chemistry not duplicated in any other book of its size.

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Nontechnical Exposition

Use and Abuse of Statistics. W. J. Reichmann. Oxford University Press, New York, 1962. 336 pp. Illus. $5.

This is not a book for statisticians; it is for the general reader, say, a man who has forgotten algebra but who likes arithmetical puzzles, or one who once tried to use a book on statistics and found that it contained too many formulas but who enjoys the business section of his newspaper. The book is about as nontechnical as is possible for one that claims to treat statistics. At no point should any reader find that his mathematics are inadequate for reading the material. This, of course, means that hardly any understanding of the mathematics of statistics is proffered.

The tone of the book is informal but sober. It is chatty, and occasionally it manages to draw two or three illustrative metaphors of widely different character into a single paragraph. The prose