still much to be said for the classical arrangement of proceeding from the simple to the complex; from the known to the unknown. Many instructors in medical biochemistry cover the material included in the appendix of the present volume in the early part of their courses.

The chapter on "Reproduction and Heredity" contains a 30-page section on genetics and blood groups. The necessity of including this and a 23-page chapter on cancer in a textbook of medical biochemistry may be questioned, especially when "Lipid Metabolism and Ketosis" is covered in 12 pages, and "Proteins and Starvation" in 27.

In general, the authors have been successful in integrating the basic and clinical aspects of the subject. The clinical applications are well chosen and of current interest. The volume should be especially valuable to physicians and interns who wish to review recent advances on the subject. Assessment of its value as a text for students beginning the study of biochemistry must await the test of usage.

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Problems in Physical Chemistry. English ed. Lars Gunnar Sillén, Paul W. Lange, and Carl O. Gabrielson. New York: Prentice-Hall, 1952. 370 pp. $5.50.

For some time this reviewer has felt the need for a problem source book as an aid in teaching physical chemistry. To a very large extent this need is satisfied by the translation of Sillén, Lange, and Gabrielson's Swedish text, which contains more than 700 problems, with answers, covering "classical" physical chemistry—e.g., 100 problems relating to thermodynamics, 75 to electrochemistry, 75 to chemical kinetics. The problems in each set are graduated as to difficulty, and, in most cases, reference is given to the original literature.

It is unfortunate that contrary to American usage the work done by a thermodynamic system is defined to be negative and, thus, the first law is written $\Delta E = q + W$. However, since this convention, and all others, are very clearly stated in the text, this change in sign should cause only momentary confusion in the mind of the reader. It is felt that the inclusion of problem sets relating to nuclear chemistry, atomic and molecular structure, and the more elementary concepts of quantum mechanics would have greatly enhanced the usefulness of the book when used in conjunction with a modern textbook such as Moore's.

Although of minor importance, it is very pleasing to see the book begin on page 1 with the generalized mol concept and ignore completely the superfluous terms gram-atom, gram-ion, etc.

Sillén's manual clearly can be useful to the lecturer, but its adoption for student use may be problematical. The discussion accompanying each problem set is exceptionally lucid, but necessarily concise; therefore, it seems doubtful that the book could stand alone as a text. On the other hand, there may be a reluctance to ask students to purchase this problem book in addition to a conventional textbook. The usefulness of this manual to the student, however, may well outweigh the monetary consideration.

The authors begin the introduction with the statement: "The student who would learn to solve physicochemical problems with confidence must be prepared for a fair amount of mental effort." The reader who works his way through the book will also have used "a fair amount of mental effort" but will be more than amply repaid for his labor.

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The Stars: A New Way to See Them. H. A. Rey. Boston: Houghton Mifflin, 1952. 143 pp. Illus. $4.00.
Pictorial Astronomy. Dinsmore Alter and Clarence H. Cleminshaw. New York: Crowell, 1952. 296 pp. Illus. $4.50.

There are unfortunately many authors who must "talk down" to their readers because they have no confidence in the earnestness and intelligence of the ordinary fellow. These authors are usually amateurs in the fields in which they write. Others, who are professionals, have learned the knack of writing lucidly, yet informatively and authoritatively. In these books we have examples of these two contrasting types.

The jacket blurb for the book by Rey speaks of the author as having "swept out the meaningless and confusing geometrical shapes that have baffled the beginning star-gazer for centuries." To justify this statement, there are pages of contrasting "old" and "new" representations, but few will recognize the "old" ones as authentic. In many instances the author has drawn absurd "old" diagrams which he has then contrasted with "new" ones that many of us have been using right along. When he does do a really new one, such as for Ursa Major or for Pegasus, he often corrupts the traditional descriptions and reverses the figures, doing a far worse job than has been done in the past.

I know from my own experience that in several planetarium cities the "new" figures of Rey have been used for many years, and some others that are far superior to his. Not all the figures are bad; many of them are good "old" ones. The jacket itself, when unfolded, is a very useful map of the Northern sky. The text and illustrations in the second half of the book, devoted to general information in astronomy, are rather good. Certainly, some new stargazers will be attracted by this book—always a good thing.

The second book is written by two professionals who have devoted many years to extending public knowledge and appreciation of astronomy at the Griffith Planetarium in Los Angeles. There are 10 pages of star maps of various kinds, but most of the 56 chapters are devoted to very lucid discussions of specific topics in astronomy, intended for the average interested but uninformed person, even some rather young ones.

Alter and Cleminshaw have had millions of people