more books on technical subjects written in easy language are advisable. Dr. Schwartz's Preface is an excellent piece of writing for the layman. It is unfortunate that the quality of this part of the book was not continued into the subsequent chapters.

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Text-book on spherical astronomy. (4th ed.) W. M. Smart. Cambridge: at the Univ. Press; New York: Macmillan, 1945. Pp. xii + 430. $4.75.

The fact that this book comes out in the fourth edition only thirteen years after its first publication is in itself an indication of its usefulness. The popularity of Smart's text is undoubtedly due to its comprehensive scope. Crossing freely the traditional frontiers of spherical astronomy, the author leads the student from astronomical coordinates and methods of position measures to the study of planetary motions, stellar motions, and binary star orbits. Included in the book are such subjects as the application of photography to astronomical measurements, the prediction of occultations and eclipses, heliographic coordinates, etc., for which adequate treatment in textbooks has not been available.

In a clear, fluent style the problems are skillfully developed with relatively simple mathematical tools. Many excellent diagrams help the understanding, and the technique of shading used for illustrating three-dimensional relationships is most successful. Each chapter is followed by a set of exercises by which the student can test his mastery of the subject.

While complete and rigorous treatment of all problems is hardly to be expected in a textbook of this kind, it seems to the reviewer that a derivation might have been given for the principal terms of precession and nutation. This would probably have avoided a serious mistake in Section 134, where the semiannual term of Nutation is erroneously attributed to the ellipticity of the earth's orbit instead of to the change in the sun's declination.

The fourth edition differs little from the second and third except for a few corrections and changes in numerical values of constants. The use of thinner paper, however, makes the volume more compact without impairing the legibility.

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Scanning Science—

Macmillan & Co. announce a work on "Social Interpretations of the Principles of Mental Development," by Prof. J. Mark Baldwin, of Princeton, and "An Outline of Psychology," by Prof. E. B. Titchener, of Cornell University.

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