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### A Century of Progress

The reader is likely to be a little misled by this book as to the full meaning of the word "Astronomy." Although the volume is entitled "100 Years of Astronomy," little mention has been made of the developments and importance of the work done in that portion of astronomy having to do with fundamental positions of stars and the particular class of problems associated with these positions. The book would have better been entitled "100 Years of Astrophysics." With this idea clearly in mind, the reader can settle back with many hours of enjoyment ahead of him because the book tells a long and fascinating story. Sympathy with the author is quickly established. One has the feeling that he is absorbed in his story; impatient even, to tell it. Although the author makes mistakes from time to time, these will cause the critical reader more amusement than annoyance because all are overshadowed by the author's earnestness in telling his tale forcibly and well. The book is non-technical and can be understood easily by the reader who has only the most elementary knowledge of astronomy. An excellent bibliography of seven pages closes the volume. This reviewer recommends the story to the general reader without reservation.—*C. E. Hesthal.*

**One Hundred Years of Astronomy**, by Reginald L. Waterfield. 526 pp. New York, the Macmillan Co., 1938. \$5.75.

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### Ion Mobility

This tract is one of a group which provides authoritative accounts of subjects of topical physical interest. With the subject matter treated here the author has been closely connected in research over a period of many years. In fact, most of the material presented consists of results of his laboratory investigations which are sufficiently extensive and complete that they, in themselves, form a connected treatise leading to the best present day knowledge about the motion of ions and ion aggregates in various gases over a large pressure range.

In seven of the eight chapters of about twelve pages each the experimental aspects are interestingly presented—ion sources, methods of measuring ion velocities, detection of ion clusters, diffusion effects and temperature effects. The other chapter is devoted to theory. Thirty-five figures, three tables and a clear handling of the selected essential factual material make this small book a most desirable one for obtaining quickly the salient features of a subject matter that seems, from the research point of view, fairly well completed. The book should prove especially useful to senior college and graduate students in mathematics, physics and chemistry and be a valuable addition to a physical science library.—*M. L. Pool.*

**The Mobility of Positive Ions in Gases**, by A. M. Tyndall. Cambridge at the University Press, in New York, the Macmillan Co., 1938. \$1.75.