---

**Constructing an Astronomical Telescope.** *G. Matthewson.* Philosophical Library, Inc., New York, Second edition, 1957, xii+100 pp. $3.00.

This small volume sets out to provide the interested hobbyist with the essential background and instructions to enable him to acquire, by his own hands, a good quality reflecting telescope, whether or not he has previously attempted the working of optical parts. Covered in detail are the general requirements for design, mirror grinding, polishing, figuring and front silvering of a small parabolic mirror and in less detail the mechanical design and construction of an astronomical telescope and suitable mounting.

The author, as a professional in another field and an amature scientist, covers too vaguely the aspects of the problem which the professional would feel fundamental to the problem, but he sets forth adequately the problems of grinding, polishing, and figuring. The discussion of optical testing leans heavily on the mechanical preparation and lightly on the meaning and interpretation of the observed patterns. Throughout, the reader is expected to learn the significance of short discussions by encountering the circumstance in the actual making of a mirror.

While the author discusses various types of equatorial mountings in the broad sense and makes very well the essential point of rigidity of the mounting, the mechanical design and problems of fabrication are left with the reader despite the inclusion, in this edition, of a new chapter briefly describing the author's own mounting.

The book is useful as a brief survey of the problem of telescope construction and as a manual for the fabrication of a mirror. A professional in the engineering or scientific fields could use this book to build an instrument. The man-in-the-street might find it too brief.

KENNETH E. KISSELL

---

**An Introduction to Astronomy.** *Robert H. Baker.* D. Van Nostrand Co., New York, 6th edition, 1961. (No price stated).

This is a new edition of the well-known text, "the little Baker," to distinguish it from the larger text by the same author, "the big Baker."

The book under review is well suited for a short course in astronomy on a freshman level. The development of astronomy is shown by the fact that the 4th edition of the book (1952) had 306 pages, the present edition has 364 pages.

The author has evidently taken care to bring up his book to date, but it is doubtful that any text-book can keep up with such a rapidly developing science as astronomy. Chapter 8 on the planets, for instance is only 30 pages long, taking out illustrations not more than twenty, and many recent results are not mentioned. To such an important subject as meteorites the author devotes not more than three pages of text. However, these are minor points; the book evidently had to be kept within certain bounds.

Our criticism is of another kind. What are freshman students supposed to get in their astronomy course? A collection of thoroughly verified facts, strung one after another in an endless procession? If so, Baker's books are certainly among the best available.

On the other hand if the teacher thinks that his students should get a picture of an intellectual adventure of mankind, with Babylonian-Egyptian astronomy in the background, a jolt to medieval science delivered by Copernicus, and a rapid development of observational and computational technique after Newton, he should look for another book: Baker has nothing to say about that.

N. T. BOBROVNIKOFF