fig. 1.5 (*b*) ii is incorrect, and on p. 8, a printing error labels a diagram with crystal class as $\bar{5}$!

In the treatment of enantiomorphism, the essential idea that enantiomorphic structures have mirror images *that are not superimposable* is not expressed explicitly; hence the dubious statement 'a centrosymmetric structure is its own enantiomorph'.

Since the book is intended for structure determinations rather than general X-ray work, its treatment of powder methods is very sparse and in some respects misleading, as for example in the rather inadequate sketch and description of a powder camera, and in the statement that only the counter moves in a powder diffractometer.

While there are minor criticisms of minor aspects of the book, there is no doubt that it achieves its major aim very effectively. It will be very useful to students of any aspect of the solid state who are interested in the determination of crystal structures.

J. ZUSSMAN

WILSON (A. J. C.). *Elements of X-ray Crystallography*. Reading, Massachusetts (Addison-Wesley), 1970. ix+256 pp., 64 figs. Price $14.75.

In a most unusual order of presentation, this book follows an introductory section on X-rays with chapters on powder cameras and powder diffractometers before discussing the symmetry of crystals and the reciprocal lattice in a chapter preceding those on single-crystal cameras and diffractometers. The author justifies this experimentation with a more normal logical presentation on the ground that the student is helped by an early encounter with experimental methods and that the powder photograph is the simplest type of diffraction pattern to understand. Whatever the general truth of this assertion, one feels the case is not well made in a text where by the third chapter the student is immersed in aberrations and line profiles in powder diffractometry before even the most elementary symmetry concepts have been mentioned. It might be improved if there was more balance in the depth of presentation, a recurrent criticism for the remaining four chapters on the intensity of X-ray diffraction, elementary statistical properties of X-ray intensities, the determination of crystal structure, and diffraction by imperfect crystals; for an introductory text the dependence on reference to original literature (between 250 and 300 papers in the bibliography) appears excessive, though more generalized suggestions for further reading (and questions) are provided at the end of each chapter.

Professor Wilson admits that this book is the outcome of lectures to physicists, and viewed in this context it may have some appeal. For chemists, metallurgists, and all those others whose work leads them into contact with the crystalline state and X-ray diffraction it provides a much less satisfactory introduction than many of the other books in this field, though it could make interesting supplementary reading for certain topics less extensively treated elsewhere. Any mineralogist, in particular, will find it difficult to be sympathetic to an approach in which, for example, the author, after damning with faint praise the methods of microscopic optics, suggests that crystal fragments should be oriented on single-crystal cameras by trial and error methods!

P. GAY