thor proposes to consider applications of group theory to the whole breadth of classical and modern physics: fields as diverse as crystallography and thermodynamics; dynamical systems and molecular physics; electrodynamics; general relativity and ergodic systems; atomic, molecular, and nuclear spectra; solid state and crystals (vibration and ionic spectra); and finally the role of groups in elementary-particle theory.

Judging from the depth and the extended treatment of the topics covered in the present and in the proposed companion volume, the author and his collaborators have aimed at producing no less than a treatise of encyclopedic character. It goes without saying that an undertaking of this scope will have enduring value in scientific circles. The specialist will find an unusual wealth of ideas and material to draw from, well organized and clearly presented as one expects from the pen of French scientists. The nonspecialist and advanced student, having neither the time nor the interest to study the original papers, will acquire more than a bird's-eye view of the beauty, elegance, and power of group theory and its vast applications to practically the whole field of theoretical physics.

Introduction to Scientific Inference. By Robert Hooke. 101 pp. Holden-Day, San Francisco, 1963. $4.74. *Reviewed by William S. Bickel, Pennsylvania State University.*

MUCH has been written about statistics and the statistical treatment of data, but *Introduction to Scientific Inference* is different in that its few pages emphasize the ideas of quantitative inference and not the mathematical techniques. But even though it is not intended to be a detailed work on statistical theory, it does present a concise mathematical introduction to many topics with which the author feels scientists and engineers should be more familiar. Obviously sympathetic with P. W. Bridgman's comment about statistics being bad enough but bad statistics being intolerable, the author has succeeded in displaying the modus operandi of the statistical treatment of data, starting with the selection of the population-sample model, leading through a discussion of confidence statements and uncertainty to fitting the mathematical model to real situations. This interesting treatment is written in a way that will be beneficial and stimulating to anyone involved in the harvest of information from experimental data.

Quantum Mechanics. By D. B. Beard. 309 pp. Allyn & Bacon, Boston, 1963. $8.95. *Reviewed by Leonard E. Porter, University of Wisconsin.*

THE avowed objective in writing this textbook was to offer an introduction to quantum mechanics which avoids the postulatory approach. The basic plan was to establish familiarity with the description and properties of wave motion, to consider evidence for the particle behavior of electromagnetic waves and the