than 16 chapters, mostly on basic topics; all are models of clarity and conciseness. Considering the great multiplicity of authorship, the articles are surprisingly uniform in their level and scope of treatment, but there are some curious exceptions. For example, the chapter on electronic circuits is so formal that no explicit description of an electron vacuum tube or a solid-state device is given, while the chapter on vacuum techniques lists, among other things, the vapor pressure and commercial supplier of beeswax.

The articles begin at the beginning, and for the most part can be read with advantage by starting graduate students. On the other hand, the topics are pursued beyond the elementary stages up to recent advances. Each chapter ends with a bibliography to more detailed treatments; in the more specialized areas, detailed references are given. It is unfortunate that references to the Springer *Handbuch* series are not included.

It is fair to say that, by and large, if a topic is not found in this handbook, it is a rather specialized one. Here is to be found the equivalent of a small library of physics books, as well as treatments of those areas of mathematics and electrical engineering of most relevance to physicists. Some things are missing, however. There are chapters on nuclear emulsions, cloud chambers, and accelerators, but nothing on Geiger tubes and scintillators. One might expect to find a long and comprehensive index in a book of this type, but the index here is a mere ten pages. This defect is mitigated in part by the logical arrangement of topics, an arrangement that an owner will soon know thoroughly from the frequent excursions he is likely to make into this handbook.

Détecteurs de Particules (Compteurs et Scintillateurs): Mécanisme et Réalisation. By Y. Rocard. 323 pp. Masson et Cie, Paris, France, 1959. Paperbound 3900 fr. *Reviewed by L. Marton, National Bureau of Standards.*

THE book review which I am submitting now to readers of this column is my third one. I started out by writing a very critical review. Then I looked at it and decided that I was perhaps overly critical and showed my review, together with the book, to a good friend who, to my surprise, found my review grossly unjust and found the book excellent. He convinced me that my viewpoint in judging the book may have been rather one-sided. What I am finally writing about this book is a presentation of both viewpoints.

When I first accepted the task of reviewing this book, I knew only the main part of the title, "Particle Detectors", without the subtitles. After receiving the book, it turned out that not only is the book limited to counters and scintillators, but there are further limitations. As pointed out in the preface written by Rocard, "The author gives all the explanations about the functioning (of the counters and scintillators) and all the useful information for their application . . . without engaging in the development of the (relevant) theories." (The words in parentheses are my additions.) This is somewhat regrettable. The author has a tendency to relate in the manner of an annotated catalogue the salient points of each paper quoted in the bibliography. This bibliography is remarkably extensive. There are something over 1400 references, all of them duly quoted in the 267 pages of text. There is hardly anything about Geiger-Mueller counters or scintillators which are not even mentioned briefly in the contents of this book.

Now we come to the essential point of diversions of opinion between my friend and myself. I represent the viewpoint that the book is essentially a cookbook in which all the little tricks tried in the laboratory are briefly reported, but without a general guide line to the physics of these devices. My friend pointed out, and quite rightly so, that such a book may be still extremely useful for those who face the task of building some of these devices for their experiments. In final analysis I think that both viewpoints are justified, and while I may not recommend the book to those who seek a general and critical presentation of the subject, I think it can be recommended to the research worker who wants to be sure that in his attempt to build a detector of this kind he hasn't overlooked something which was tried long ago.

Turning Points in Physics: A Series of Lectures given at Oxford U. in Trinity Term 1958. 192 pp. (North-Holland) Interscience Publishers, Inc., New York, 1959. $3.50. *Reviewed by R. Bruce Lindsay, Brown University.*

THE history of science like history in general can be approached from many points of view. One of the most fascinating is that which sees in certain epochs decisive changes in the direction of theory and the introduction of radically new concepts. This is the theme of the present volume, which is based on a series of six lectures given in the Trinity Term of 1958 at Oxford University by faculty members of the University. The lecturers and their topics follow: R. J. Blin-Stoyle, The End of Mechanistic Philosophy and the Rise of Field Physics; D. ter Haar, The Quantum Nature of Matter and Radiation; K. Mendelssohn, Probability Enters Physics; G. Temple, From the Relative to the Absolute; F. Waismann, The Decline and Fall of Causality; and D. H. Wilkinson, Towards New Concepts: Elementary Particles. A brief introduction is supplied by A. C. Crombie, the well-known historian of science at Oxford.

The essays are very readable and retain to a large extent the flavor of the spoken word. As the titles indicate each looks upon a certain period as principally characterized by a new and epoch-making development. So much has been written about the first four that it is obviously difficult to say much that is original. The main problem is to hit the high spots in emphatic fashion. This the authors have in general managed to do successfully, though the professional historian of science will no doubt have some reservations. Thus in