

# BOOKS

## STATIC AND DYNAMIC ELECTRICITY — 2ND. ED.

by W. R. Smythe

McGraw-Hill, New York, \$6.00

*Reviewed by Robert B. Leighton  
Assistant Professor of Physics*

**T**HIS THOROUGHLY REVISED second edition of a text which was already one of the most useful in its field has resulted in an even more useful book. The units have been changed throughout to the rationalized MKS system, much new material has been added in the fields of wave-guides, cavity resonators and antennas, and many of the later chapters have been rewritten and simplified. In addition, many new problems with useful applications are given (with answers, so that the results can be used directly by those who do not wish to work the problems).

Much of the work in the chapters on electromagnetic radiation is greatly simplified through the introduction of orthogonal vector surface harmonics. Many of the results and

methods are not to be found in the literature, and the index includes references not only to the text material, but also to the problems at the ends of the chapters. This feature should prove quite useful to engineers who have boundary value problems to solve.

## THEORY AND DESIGN OF ELECTRON BEAMS

by J. R. Pierce

D. Van Nostrand Co., Inc.,  
New York, \$6.00

**T**HIS BOOK IS an attempt to assemble—with what the author describes as “reasonable orderliness” — the minimum amount of theoretical material necessary for a good understanding of electron flow and electron focusing in devices other than electron microscopes and image tubes. The material is presented completely enough so that it can be understood without reference to other sources. No attempt is made to deal

with problems of experimental technique. “Concerning these,” says Dr. Pierce, “I offer nothing but sympathy.”

Dr. Pierce graduated from the California Institute in 1933, received his M.S. here in 1934, and his Ph.D. in 1936. Since that time he has been a distinguished member of the Technical Staff of the Bell Telephone Laboratories.

## THE STORY OF MY PSYCHOANALYSIS

by John Knight

McGraw-Hill, New York, \$2.95

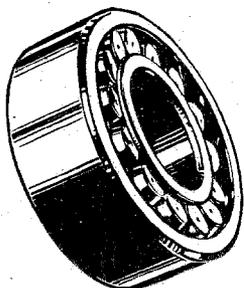
**T**HIS STRAIGHTFORWARD, unemotional account of a man's psychoanalysis from start to finish is probably the first time this procedure has been explained in layman's language, and from a patient's point of view. The author (a research chemist writing under a pseudonym) blessedly avoids both professional psychiatric jargon and phony detective-story suspense.

What is  
“TOLERANCE CONTROL” ...



... in a bearing

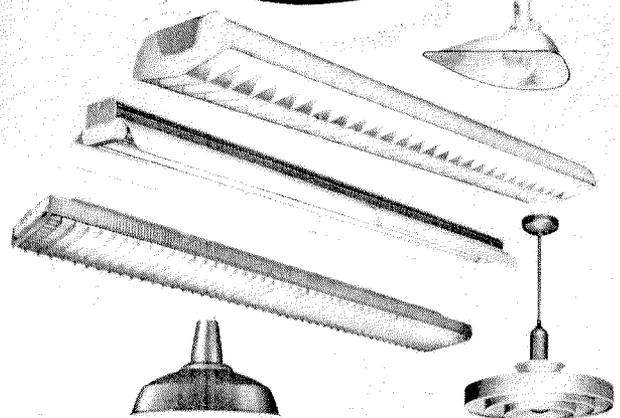
You don't want tolerances too great ... and you don't want tolerances closer than the job demands. But you want to be sure that tolerances are *right* ... are *always* properly controlled ... *always* meet established standards. At SKF, ceaseless vigilance in every stage of production assures complete control of tolerance throughout the manufacturing cycle. SKF Industries, Inc., Phila. 32, Pa. 7177



**SKF**  
Ball and Roller Bearings

Another famous western brand

The West's accepted brand of quality in lighting equipment! Look for this mark of excellence in meeting your lighting needs. Smoot-Holman Illumination is distinguished by outstanding design, superior construction and economical performance in commercial, industrial and institutional uses.



SMOOT-HOLMAN COMPANY Inglewood, Calif. Offices in Principal Western Cities - Branch and Warehouse in San Francisco