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# ELECTRICAL MACHINERY

PRINCIPLES, OPERATION AND  
MANAGEMENT

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BY  
**TERRELL CROFT**  
CONSULTING ELECTRICAL ENGINEER

FIRST EDITION  
SEVENTH IMPRESSION

**McGRAW-HILL BOOK COMPANY, Inc.**  
239 WEST 39TH STREET. NEW YORK

LONDON: HILL PUBLISHING CO., LTD.  
6 & 8 BOUVERIE ST., E. C.

3ma/205

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THE MAPLE PRESS YORK PA

## PREFACE

It has been the author's experience that there are certain things which it is necessary and desirable for the average man to know about electrical machinery—and it is entirely possible to transmit this essential information without the use of difficult mathematics. Furthermore, there are a great many more things about electrical machines which (though they may be interesting) it is not necessary that the average man should know.

In preparing this "Electrical Machinery" book we have endeavored to include the essential and desirable things and to omit the non-essentials. We have tried to explain the theoretical principles and outline the operating facts, relating to alternating-current and direct-current generators and motors, and similar electrical machines, on this basis. Control apparatus has been given due attention. Furthermore, we believe that any individual who can read English will be able to get the meat from this volume without the expenditure of excessive effort.

Following out the general idea above disclosed, much of the material has to do with installation and operation—trouble location, its correction and the like. There is practically nothing in here on design because of two splendid reasons: (1) The manufacturers in this United States design, build and sell perfectly good electrical apparatus much more effectively and economically than can any one who is not regularly engaged in the business. Hence, when the average man wants electrical equipment he buys it on the market. (2) It requires a lot of special knowledge and mathematics to design electrical machinery.

Summarizing: "Electrical Machinery" is a manual of explanation of basic theoretical principles, operation and