WIRELESS TELEGRAPHY: A HANDBOOK FOR THE USE OF OPERATORS AND STUDENTS

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A HANDBOOK FOR THE USE OF OPERATORS AND STUDENTS

BY

W. H. MARCHANT

Author of "Radio-Telegraphist's Guide"

154 ILLUSTRATIONS

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PREFACE

THIS book is intended primarily for the use of those engaged in the practical operation of Radio-Telegraph installations and for students who already possess some knowledge of electrical science.

The first portion of the book (Chapters I.-V.) deals with the production and radiation of electric oscillations and waves, followed by a description of the various pieces of apparatus which go to make up a Radio-Telegraph installation and the principles which govern their construction and erection.

Following this will be found descriptions of the principal systems. Chapter VI. is devoted to the Marconi system, which is the principal system employing the spark method of generating electrical oscillations. In this chapter will be found a full description of the Marconi 1½ kw. ship set. This type of installation is in such very general use that hardly any students sitting for the P.M.G.'s certificate pass their examination on any other apparatus. For this reason considerable space has been devoted to it and the various pieces of apparatus fully illustrated.

Chapter VII. deals with the Poulsen system, which is representative of the arc method of generating electrical oscillations. In it will be found a full description of Poulsen apparatus, both for hand and automatic work-

ing. The quenched-spark method of generating electrical oscillations is represented by a description of a Telefunken I.T.K. set and of the Lepel system.

Following this will be found a description of the Goldschmidt high-frequency alternator, a machine which in the future may play a leading part in long-distance wireless telegraphy. A special chapter is devoted to portable installations, and sets suitable for airships, military purposes, yachts and small craft generally are described therien.

In Chapter XII. the apparatus necessary and methods of carrying out all the more important measurements will be found described.

Following this is a short chapter on the interpretation of diagrams, which it is thought will prove useful to students approaching the subject for the first time. Such students are recommended to read through this chapter first and so become acquainted with the meaning of the symbols used to represent the various pieces of apparatus.

Chapters XIV. and XV. contain the principal regulations and instructions for Radio-Telegraph stations licensed by H.M. Postmaster-General and the various abbreviations, codes, etc., used in working.

In conclusion the author desires to tender his sincere thanks to the following gentlemen and companies for assistance rendered :—Sidney Brown, Esq., for information relating to his telephone relay ; Messrs the Marconi Press Agency Limited for illustrations of the Marconi system ; Messrs Siemens Bros. & Coy. for illustra-

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W. H. M.

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