HOW TO WIRE BUILLDINGS: A MANUAL OF THE ART OF INTERIOR WIRING

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How to Wire Builldings: A Manual of the Art of Interior Wiring by Augustus Noll

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AUGUSTUS NOLL

HOW TO WIRE BUILLDINGS: A MANUAL OF THE ART OF INTERIOR WIRING

Trieste

C. L Cory comp. of author

HOW TO WIRE BUILDINGS:

UNIV. OF a manual CALIFORNIA

OF THE ART OF INTERIOR WIRING.

BY

AUGUSTUS NOLL, E.E., μ

Member Am, Inst. of Ricc, Engineers,

WITH MANY ILLUSTRATIONS.

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PREFACE.

It would be impossible to exaggerate the importance of good wiring as an element in the prosperity and permanence of the various electrical industries; and the writer of the present modest volume believes that his efforts to explain the true principles of good wiring and to point out the best methods will be welcomed cordially by electrical engineers, contractors, wiremen and the public generally.

The idea followed in inditing these pages has been to draw upon personal experiences ranging over a great many years, and to set forth in plain, simple language the things that must be done and the things that must be avoided. Every part of the subject is treated in such a manner that beginners, wiremen and others interested in the practical branches of the art of interior wiring can, with a little attention, understand readily why certain practices are preferable to others, and how a piece of work can be rendered safe and satisfactory. It is believed that practical advice from one who has himself tested by actual work and observation the value of every rule and

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PREFACE.

suggestion here offered, will be very helpful. While much may seem novel, no statement is made that practice does not confirm, and no method is recommended that experience and common sense do not approve.

There is as far as possible all avoidance of abstruse technicalities in the descriptions, and the divisions have been made with a view to an easier comprehension of the different parts of the subject. A special series of drawings has been made for the book which will be appreciated, the author thinks, in several quarters; and many of which have long been needed.

It is hoped that a perusal of this book may lead many workmen forward to the study of other books that they have hitherto found too technical, so that they will then be able to see how close is the relation between good work and sound theory. All that the author asks credit for is an earnest desire, of which this little book is the expression, for the perfection of an art to whose improvement he has devoted all his time and thought.

AUGUSTUS NOLL.

NEW YORK CITY, June, 1893.

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HOW TO WIRE BUILDINGS.

CHAPTER I.

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INTRODUCTION.

1. In the science of electricity the question of "wiring" is hardly considered, but in the application of electricity from a practical and commercial standpoint it is one of the most important and difficult factors. It embraces nearly every branch of what is termed "construction work." The student in electricity may have sufficiently mastered the theory of electrical currents, together with a knowledge of the different definitions and terms, to an extent that will enable him to "lay-out" wiring, on paper, in the form of a plan, showing the different circuits, sizes of wires, etc.; and while his work may be all that is desired in the shape of a plan, it will very often, even while the wires are being installed, fail of its purpose, owing to the conditions which exist in the building and which. were not considered or known at the time of making the plan. The mere electrical student cannot thor-