# MANUAL OF RAILWAY ENGINEERING: FOR THE FIELD AND OFFICE

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Manual of Railway Engineering: For the Field and Office by Charles P. Cotton

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### **CHARLES P. COTTON**

## MANUAL OF RAILWAY ENGINEERING: FOR THE FIELD AND OFFICE



MANUAL OF RAILWAY ENGINEERING.

DUBLIN: PRINTED BY PORTEOUS AND GIBES, WICKLOW STREET,

#### MANUAL

OF

### RAILWAY ENGINEERING

FOR

## The field and the Office.



SECOND EDITION REVISED AND ENLARGED.

CHARLES P. COTTON

DUBLIN: WILLIAM M°GEE, 18 NASSAU STREET. LONDON: E. & F. N. SPON, 48 CHARING CROSS. 1874. 1

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THE object of the Author in writing this Manual was, first, to assist pupils on joining an office to understand what was going on around them; and, secondly, that it should be a book of reference in the various routine steps up to the preparation and letting of a Railway contract.

The Author in this work only deals with ordinary every-day work, leaving anything outside that to be sought in the many treatises specially written on the various subjects that a Railway Engineer may have exceptionally to deal with.

AUGUST, 1874.



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