# GRISWOLD'S RAILROAD ENGINEERS' POCKET COMPANION FOR THE FIELD

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Griswold's Railroad Engineers' Pocket Companion for the Field by W. Griswold

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## W. GRISWOLD

# GRISWOLD'S RAILROAD ENGINEERS' POCKET COMPANION FOR THE FIELD



### GRISWOLD'S

# POCKET COMPANION

## for the field.

COMPRESSIO

RULES FOR CALCULATING DEFLEXION DISTANCES AND ANGLES, TANGENTIAL DISTANCES AND ANGLES, AND ALL NECESSARY TABLES FOR ENGINEERS;

ALSO,

THE ART OF LEVELING FROM PRELIMINARY SURVEY TO THE CONSTRUCTION OF RAILROADS, INTENDED EXPRESSLY FOR THE YOUNG ENGINEER

TOOKTHER.

WITH NUMEROUS VALUABLE RULES AND EXAMPLES.

BY W. GRISWOLD.

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1866.

Entered according to Act of Congress, in the year 1864,

Br W. GRISWOLD,

In the Clerk's Office of the District Court of the United States for the Northern District of New York.

### PREFACE.

In offering this book to the patronage of the Assistant Engineer, I would wish to remark, that the book is composed of notes that I have long been collecting.

Every Engineer has his private book of Rules, that should he want for memory in the field, he has only to refer to his book.

This book I have intended for the same object.

For the benefit of the young Engineer, I have inserted the art of leveling, running levels (as it is termed) in plain language, from preliminary surveys to the construction of a railroad; the manner of taking cross sections of the road bed, and setting slope stakes, with its rules. Every feature of the book has a tendency to attract the attention of both the Assistant and the young Engineer.

Tables that would be more used by the Assistant Engineer, are inserted, which can be relied upon as correct, as I have taken them from reliable authors.

In the art of leveling, I have made no allowance for the Earth's curvature, as in practice upon railroads no allowance is ever made.

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