

**POCKET COMPANION  
FOR LOCOMOTIVE  
ENGINEERS AND FIREMEN**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649427444

Pocket Companion for Locomotive Engineers and Firemen by Charles A. Hoxsie

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**CHARLES A. HOXSIE**

**POCKET COMPANION  
FOR LOCOMOTIVE  
ENGINEERS AND FIREMEN**



POCKET COMPANION  
FOR  
LOCOMOTIVE ENGINEERS AND FIREMEN:

CONTAINING  
GENERAL RULES AND SUGGESTIONS  
FOR THE  
MANAGEMENT OF AN ENGINE UNDER ALL CIRCUMSTANCES.

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BY CHARLES A. HOXSIE,  
PRACTICAL ENGINEER.

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FIFTH EDITION.



ALBANY:  
WEED, PARSONS AND COMPANY, PRINTERS.  
1876.

Entered according to Act of Congress, in the year 1875, by  
CHARLES A. BOXER,  
In the Office of the Librarian of Congress, at Washington.

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## INTRODUCTION.

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This little work is designed for Locomotive Engineers and Firemen. It is written with a view of aiding, in a spirit of earnest sympathy, those desirous of fully understanding and mastering their responsible vocation. While there are not many works that explain, plainly and thoroughly, and with freedom from unnecessary technicality, the management of the locomotive, it is true that in no other branch of mechanical industry is a correct knowledge of principles and details more important. Indeed, the possession of such a knowledge is an indispensable requisite to the man who is daily intrusted with the safety of human life and property. Believing, from a practical experience of many years, that there is positive need of a manual that will impart to Engineers and Firemen precise practical knowledge on the subject of their

duties, and the general care of an engine, the author has been induced to prepare the treatise which follows. He does not claim for his work a high degree of literary excellence, but he has the vanity to believe that in putting upon paper the actual results of and deductions from his own experience, he has placed it within the power of any competent and intelligent mechanic to become entirely familiar with his duties, and, in fact, to make himself a first-class Engineer.

The book is designed also as a pocket companion for those as well who have mastered their profession, much embarrassment being often avoided by the possession of a convenient work of reference when exact information is desired. It is anticipated, therefore, that the work will prove as valuable to the experienced Engineer as to the tyro in the profession. That it will have a tendency to elevate the Engineer in his calling and add to his usefulness to his employer and the public is the earnest hope of the writer.

In placing the result of his labors before his brother Engineers, the author begs leave to

state that he has endeavored throughout to conform himself strictly to the matter in hand, viz., the succinct explanation of the use and operation of all the important parts of the locomotive engine, its care, and the proper performance of the duties devolving upon the Engineer. The explanations and instructions will be given in the plainest possible language, devoid of scientific terms, and condensed as much as is consistent with entire clearness of statement. The reason of things as well as the operation and the effect, will be fully explained, and no idea will be advanced that cannot be entirely substantiated. In short, it is designed that it shall constitute a comprehensive and common sense manual of locomotive engineering, and as such it is confidently hoped that it will meet, in an especial manner, the necessities of those who have not had an opportunity to acquire that knowledge which their profession calls for. The book is not designed for the instruction of locomotive builders or machinists, but solely for the improvement of Engineers and Firemen, and therefore much that is merely technical in regard to the