

PREFACE.

THE present treatise on Roofs and Bridges is designed as a text-book for the use of schools. The object of this work is to develop the principles and explain the methods employed in finding the forces in Roofs and Bridges, and to train the student to compute the stresses, due to the dead, live, snow, and wind loads, in the different members of any of the simple roof and bridge trusses that are in common use.

The aim has been to explain the principles clearly and concisely, to develop the different methods simply and neatly, and to present the subject in accordance with the methods used in the modern practice of roof and bridge construction.

In introducing each new truss it is at first carefully described, and the method of loading it explained. A problem is then given for this truss, and solved to determine the stresses in all the members. This problem is followed by several other similar ones, which are to be solved by the student. Nearly all of these problems were prepared especially for this work, and solved to obtain the answers. The instructor can at any time easily make up problems for his pupils without the answers.

The book consists of four chapters. Chapter I. is entirely given to Roof Trusses. Chapter II. treats only of Bridge Trusses with Uniform Loads.