

CONTENTS

Chapter	Page
I. Mechanics	5
II. Statics	7
III. Graphical Representations—the Resultant— Components	9
IV. Moments—Analytical Conditions of Equi- librium—Couples	22
V. Determination of Unknown Forces—Tension and Compression — Stress in Truss Members	31
VI. The Equilibrium or Funicular Polygon	41
VII. The Method of Sections	49
VIII. The Beam	53
IX. Vertical Shearing Force and Bending Moment for Stationary Loads on a Beam	59
X. V.S.F. and B.M. for Moving Loads on a Beam	74
XI. Pulley Systems	78
XII. Friction	87
XIII. Wind Pressure	94
XIV. Miscellaneous Problems	97
XV. Simultaneous use of Equations	126
XVI. Determination of Stress in Bridge and Roof Truss Members	141
Appendix	159