PREFACE.

This book treats in an elementary manner the whole of what is ordinarily known as Abstract Dynamics, including Kinematics, Kinetics, and Statics, and is designed for use in the higher classes of Schools and the junior classes of Colleges and Universities. It assumes, therefore, a knowledge of only the more elementary branches of Mathematical Science—Geometry, Algebra, and Plane Trigonometry.

The kinematical portions of the subject are treated by themselves, not only because this course is the more logical, but also because it has been found in my experience to be the better from an educational point of view.

The usual division of Dynamics into Kinetics and Statics has not been adopted; but statical problems are throughout regarded as boundary cases of kinetic problems, the equations of equilibrium being in all cases deduced from the equations of motion. This course also