

MECHANICS AND NATURAL PHILOSOPHY BEFORE THE SCIENTIFIC REVOLUTION

Edited by

WALTER ROY LAIRD
*Carleton University, Ottawa,
Canada*

and

SOPHIE ROUX
*Université Grenoble II,
Institut universitaire de France*

 Springer


 EUROPEAN
SCIENCE
FOUNDATION

TABLE OF CONTENTS

Introduction <i>Roy Laird and Sophie Roux</i>	1
1. ANCIENT AND MEDIEVAL MECHANICS	
Theory and Practice in Heron's <i>Mechanics</i> <i>Mark J. Schiefsky</i>	15
Bradwardine's Rule: A Mathematical Law? <i>Jean Celeyrette</i>	51
The Origin and Fate of Thomas Bradwardine's <i>De proportionibus velocitatum in motibus</i> in Relation to the History of Mathematics <i>Edith Dudley Sylla</i>	67
Concepts of Impetus and the History of Mechanics <i>Jürgen Sarnowsky</i>	121
2. THE REAPPROPRIATION AND TRANSFORMATION OF ANCIENT MECHANICS	
Circular and Rectilinear Motion in the <i>Mechanica</i> and in the 16th Century <i>Christiane Vilain</i>	149
Nature, Mechanics, and Voluntary Movement in Giuseppe Moletti's Lectures on the Pseudo-Aristotelian <i>Mechanica</i> <i>Walter Roy Laird</i>	173
Mechanics and Natural Philosophy in Late 16th-Century Pisa: Cesalpino and Buonamici, Humanist Masters of the Faculty of Arts <i>Mario Otto Helbing</i>	185
The Enigma of the Inclined Plane from Heron to Galileo <i>Egidio Festa and Sophie Roux</i>	195

3. MECHANICS IN NEW CONTEXTS

The Pendulum as a Challenging Object in Early-Modern Mechanics <i>Jochen Büttner</i>	223
Mechanics in Spain at the End of the 16th Century and the Madrid Academy of Mathematics <i>Victor Navarro Brotos</i>	239
Mechanics and Mechanical Philosophy in some Jesuit Mathematical Textbooks of the Early 17th Century <i>Geert Vanpaemel</i>	259
Bibliography	275
Author Index	297
Subject Index	301