

Contents

Preface	ix
<i>PART 1</i>	
Introduction	1
Bibliography	34
<i>PART 2</i>	
1. Robert Boyle: The Spring of the Air (from <i>New Experiments Physical-Mechanical</i> , etc., 1660)	43
2. Isaac Newton: The Repulsion Theory (from <i>Philosophiae Naturalis Principia Mathematica</i> , 1687)	52
3. Daniel Bernoulli: On the properties and motions of elastic fluids, especially air (from <i>Hydrodynamica</i> , 1738)	57
4. George Gregory: The Existence of Fire (from <i>The Economy of Nature</i> , 1798)	66
5. Robert Mayer: The Forces of Inorganic Nature (from <i>Annalen der Chemie und Pharmacie</i> , 1842)	71
6. James Joule: On Matter, Living Force, and Heat (from the <i>Manchester Courier</i> , 1847)	78
7. Hermann von Helmholtz: The Conservation of Force (from <i>Ueber die Erhaltung der Kraft</i> , 1847)	89
8. Rudolf Clausius: The Nature of the Motion which we call Heat (from <i>Annalen der Physik</i> , 1857)	111

9. Rudolf Clausius: On the mean length of the paths described by the separate molecules of gaseous bodies (from <i>Annalen der Physik</i> , 1858)	135
10. James Clerk Maxwell: Illustrations of the Dynamical Theory of Gases (from <i>Philosophical Magazine</i> , 1858)	148
11. Rudolf Clausius: On a Mechanical Theorem applicable to Heat (from <i>Sitzungsberichte der Niederrheinischen Gesellschaft</i> , Bonn, 1870)	172
Index	179