

CONTENTS

Preface.....	ix
<i>by Katherine R. Sopka</i>	
Foreword.....	xiii
<i>by Albert E. Moyer</i>	
Introductory Address: The Evolution of the Scientific Investigator.....	3
<i>by Simon Newcomb</i>	
On the Theory of Science.....	17
<i>by Wilhelm Ostwald</i>	
The Content and Validity of the Causal Law	39
<i>by Benno Erdmann</i>	
The Unity of Physical Science	79
<i>by Robert Simpson Woodward</i>	
The Fundamental Concepts of Physical Science	95
<i>by Edward Leamington Nichols</i>	
The Progress of Physics in the Nineteenth Century	107
<i>by Carl Barus</i>	
The Relations of the Science of Physics of Matter to Other Branches of Learning.....	145
<i>by Arthur Lalanne Kimball</i>	
Present Problems in the Physics of Matter	165
<i>by Francis Eugene Nipher</i>	
The Ether and Moving Matter.....	181
<i>by Dewitt Bristol Brace</i>	
The Relations of Physics of Electrons to Other Branches of Science.....	195
<i>by Paul Langevin</i>	
Present Problems of Radioactivity.....	233
<i>by Ernest Rutherford</i>	
Short Paper	263
Bibliography.....	265
The Relations of Applied Mathematics.....	267
<i>by Ludwig Boltzmann</i>	
The Principles of Mathematical Physics.....	281
<i>by Henri Poincaré</i>	
Picture Credits	300