

CONTENTS

<i>Preface</i>	<i>page ix</i>
<i>Chapter I. THE ORIGINS</i>	I
Prehistory—The Dawn of History—Egypt—Babylonia—China and India—Crete and Mycenae.	
<i>Chapter II. GREECE AND ROME</i>	16
Greek Religion—The Ionian Philosophers—The Atomists—The Pythagoreans—Greek Medicine—Socrates and Plato—Aristotle—The Hellenistic Period—Deductive Geometry—Archimedes, Aristarchus and Hipparchus—The School of Alexandria—Alchemy—The Roman Age.	
<i>Chapter III. THE MIDDLE AGES</i>	34
The End of Ancient Learning—The Fathers of the Church—The Dark Ages—The Arabian School—The Revival in Europe—The Thirteenth Century and Scholasticism.	
<i>Chapter IV. THE RENAISSANCE</i>	46
The Causes—Leonardo da Vinci—The Reformation—Copernicus and Astronomy—Chemistry and Medicine—Anatomy, Physiology and Botany—Magnetism and Electricity—Philosophy—Witchcraft.	
<i>Chapter V. GALILEO AND NEWTON: THE FIRST PHYSICAL SYNTHESIS</i>	61
Galileo—Boyle, Huygens and others—Scientific Academies—Newton and Gravitation—Mass and Weight—Optics and Light—Newton and Philosophy—Newton in London.	
<i>Chapter VI. THE EIGHTEENTH CENTURY</i>	78
Philosophy—Mathematics and Astronomy—Chemistry—Physiology, Zoology and Botany—Geography and Geology—Machinery.	
<i>Chapter VII. PHYSICS AND CHEMISTRY OF THE NINETEENTH CENTURY</i>	92
The Scientific Age—Heat and Energy—Thermodynamics—The Wave Theory of Light—Spectrum Analysis—Electric Currents—Electro-magnetism—The Atomic Theory—Organic Chemistry—Chemical Action—Solution—Colloids.	
<i>Chapter VIII. NINETEENTH-CENTURY BIOLOGY</i>	113
Biology and its Effects—Physiology—Bacteriology—The Carbon and Nitrogen Cycles—Geography and Geology—Evolution and Natural Selection—Anthropology—Nineteenth-Century Science and Philosophy—Psychology.	

<i>Chapter IX.</i>	RECENT BIOLOGY	129
Genetics—Geology and Oceanography—Biochemistry, Physiology and Psychology—Viruses and Immunity—Anthropology.		
<i>Chapter X.</i>	THE NEW PHYSICS AND CHEMISTRY	142
The Physical Revolution—Cathode Rays and Electrons—Radio-activity—X-rays and Atomic Numbers—Positive Rays and Isotopes—The Structure of the Atom—The Transmutation of Elements—Electro-magnetic Waves—Relativity.		
<i>Chapter XI.</i>	THE STELLAR UNIVERSE	162
The Solar System—The Stars and Nebulae—The Structure of Stars—Stellar Evolution—The Beginning and End of the Universe—Conclusion.		
<i>A Note on Bibliography</i>		174
<i>Index</i>		176