

CONTENTS.

CHAPTER	PAGE
..... TO THE READER	v

ENERGY.

I. ENERGY A CONSTANT QUANTITY.....	1
II. ENERGY OF MOTION AND OF POSITION	17
III. THE FORCES OF NATURE.....	26
IV. TRANSMUTATION OF ENERGY.....	35
V. ENERGY IN RELATION TO LIFE.....	48

VIBRATION.

VI. SOUND.....	56
VII. ECHO AND RESONANCE.....	67
VIII. SOUND-SYMPATHY.....	75
IX. NOISE AND MUSIC.....	80
X. MUSIC AND MUSICIANS	86
XI. SOUND-INTERFERENCE.....	99
XII. SOUND-LANGUAGE.....	104
XIII. HEAT AND MATTER.....	109
XIV. EXPANSION.....	119
XV. TERRESTRIAL HEAT.....	129
XVI. GENERATION OF HEAT.....	134
XVII. DIFFUSION OF HEAT.....	144
XVIII. RADIATION OF HEAT.....	149