

CONTENTS

| | PAGE |
|------------------------|------|
| INTRODUCTION | I |

PART I

THE PROPOSITIONS OF SCIENCE

| CHAP. | | |
|-------|---|-----|
| I. | THE SUBJECT MATTER OF SCIENCE | 15 |
| II. | THE NATURE OF LAWS | 38 |
| III. | THE NATURE OF LAWS (<i>contd</i>) | 56 |
| IV. | THE DISCOVERY AND PROOF OF LAWS | 88 |
| V. | THE EXPLANATION OF LAWS | 113 |
| VI. | THEORIES | 119 |
| VII. | CHANCE AND PROBABILITY | 159 |
| VIII. | THE MEANING OF SCIENCE | 215 |
| IX. | SCIENCE AND PHILOSOPHY | 230 |

PART II

MEASUREMENT

| | | |
|--|--|-----|
| | X. FUNDAMENTAL MEASUREMENT | 267 |
| | XI. PHYSICAL NUMBER | 295 |
| | XII. FRACTIONAL AND NEGATIVE MAGNITUDES | 310 |
| | XIII. NUMERICAL LAWS AND DERIVED MAGNITUDES | 328 |
| | XIV. UNITS AND DIMENSIONS | 361 |
| | XV. THE USES OF DIMENSIONS | 403 |
| | XVI. ERRORS OF MEASUREMENT; METHODICAL ERRORS | 437 |
| | XVII. ERRORS OF MEASUREMENT; ERRORS OF CONSISTENCY AND THE ADJUSTMENT OF OBSERVATIONS | 457 |
| | XVIII. MATHEMATICAL PHYSICS | 522 |
| | APPENDIX | 550 |
| | INDEX | 561 |