

CONTENTS

CHAPTER I.

EVOLUTION AND BEGINNINGS.

Evolution the working hypothesis of scientific men—
 Evolution as a dogmatic faith—Truth of evolution—
 The primitive nebulosity—Spectrum analysis—Star
 systems—Professor Karl Pearson on lifeless chaotic
 mass—Chaos unthinkable—Homogeneousness—Evo-
 lution must commence somewhere—Its commence-
 ment a relative unity 1

CHAPTER II.

EVOLUTION AND LAW.

Nature is what is fixed, stated, settled—Law and hypo-
 thesis—The nebular theory—Its plausibilities and its
 difficulties—The nebular theory and evolution—It
 involves a rational system—The theistic argument—
 Continuity—Evolution a real process—“Instability
 of the homogeneous”—Multiplication of effects—
 “Is the effect more complex than the cause?”—
 Criticism of this statement 17

CHAPTER III.

NATURE AND INTELLIGIBILITY.

Additional factors—Transition from physics to chemistry—
 Chemical elements—Their character, relations, adap-
 tations, periodicity—Rational character of these rela-
 tions—Nature is intelligible, and therefore related to
 intelligence—Attempts at explanation—The chemical
 elements exist in the unity of one system 33

CONTENTS

CHAPTER IV.

THE STRIFE AGAINST PURPOSE.

Is the issue raised by evolution new or old?—Scope of evolution—Is evolution self-explanatory?—Fiske on teleology, against and for—Order and purpose—Efficient and final causes—Caprice—Spinoza on final causes—Mathematics—Purposiveness—The same facts and laws appear from the point of view of cause and of purpose—Chance or purpose 50

CHAPTER V.

EVOLUTION AND CREATION.

History of the earth—Evolution as seen in geologic eras—Continuity of the process—Succession—Advance and preparation for advance—Physics and geology—Some unsettled questions—Professor Caird on evolution from two points of view—At the beginning or at the end, which?—Is the issue arbitrary arrangement *versus* evolution?—No: creation by slow process is creation—Illustrations—Mechanics and purpose once more 69

CHAPTER VI.

ORGANIC EVOLUTION.

Statement by Professor Ray Lankester—New sets of terms used in biology—Why are there new terms?—Dr. Burdon Sanderson—Darwinism—Variation, struggle for existence, natural selection, transmission—Anthropomorphic character of the process—Malthusianism—Utilitarianism—What is natural selection?—Comparison with the process of denudation in geology by Mr. J. T. Cunningham—Darwin on the eye—Professor Huxley's reproduction of chance—Organic evolution likely true, but its factors not yet discovered 88

CONTENTS

vii

CHAPTER VII.

ORGANIC EVOLUTION (*continued*).

Biology before and after Darwin—Physical continuity of life—Laws and conditions of life—Adequacy or inadequacy of natural selection?—Inter-relations of life—Professor Geddes on anthropomorphism of the nineteenth century and of the eighteenth—Weismann—Natural selection is elimination of the unfit—Oscillation between natural selection as negative and as positive—Poulton, “that selection is examination”—Teleology run mad—Mimicry—Search after utility—Mutual benefit of species in co-operation—Illustration—Struggle for existence thus modified—Results 110

CHAPTER VIII.

SUPER-ORGANIC EVOLUTION.

Controversy regarding heredity—Spencer and Weismann—Machinery of evolution defective—Limits of organic evolution—Man does not modify himself, but modifies his environment—Survival of the fittest explained by Huxley and by Spencer—Evolution does not account for advance—Illustration of man’s power of modifying his environment—Results 132

CHAPTER IX.

EVOLUTION AND PSYCHOLOGY.

Human and animal intelligence—Rational self-consciousness—Habit—Feelings, emotions, appetites in rational beings and in irrational—Differences in kind and in degree—Romanes and Spencer—Can feelings make a consciousness?—The self—Genesis of self according to Romanes and Spencer—Unity of human nature—Russel Wallace’s deistic view—Creation is continuous—Results 154

CONTENTS

CHAPTER X.

EVOLUTION AND ETHICS.

Ethics of evolution—Professor Huxley's ethical ideal— Whence derived?—Not from cosmic process, not from Greek or Roman ethics, nor from ordinary human ethics—Ethical life: what it is—Struggle for existence partial in cosmos: at its fiercest in human life—Spheres of human conduct non- moralised—Moral ideals—Moral obligation—The Christian ethical ideal—Its acknowledged supre- macy—Its character—Recognition of it—Not derived from evolution—Christian ethics both test and goal of ethical evolution	178
---	-----

CHAPTER XI.

EVOLUTION AND RELIGION.

The Christian religion—The Christian goal of life— Fellowship with God—Christian religious ideal real- ised in Jesus Christ—Immanence of God—Christ not evolved—Evolution holds for all others—The ghost theory of religion—Spencer's reconciliation of science and religion—Criticism—Worship <i>for</i> an- cestors distinguished from worship <i>of</i> ancestors— Evolved conduct and evolved belief—Universality of religion—Manifestations of religion—Correspond- ence with reality—Eternal element in religious emotion—Christianity and evolution—Analogy be- tween evolution in all spheres and the evolution of Christian life	204
---	-----