## CHAPTER XV.

UNIVERSE DEVELOPMENT OF THE THEORY  $\mathbf{OF}$ THE SPONTANEOUS GENERA-OF THE EARTH. ANDPLASTID CARBON THEORY. THETHE TION. THEORY.

History of the Development of the Earth.—Kant's Theory of the Development of the Universe, or the Cosmological Gas Theory.—Development of Suns, Planets, and Moons.—First Origin of Water.—Comparison of Organisms and Anorgana.—Organic and Inorganic Substances.—Degrees of Density, or Conditions of Aggregation.—Albuminous Combinations of Carbon.—Plasson-bodies.—Organic and Inorganic Forms.—Crystals and Monera.—Formless Organisms without Organs.—Stereometrical Fundamental Forms of Crystals and of Organisms.—Organic and Inorganic Forces.—Vital Force.—Growth and Adaptation in Crystals and in Organisms.—Formative Tendencies of Crystals.—Unity of Organic and Inorganic Nature.—Spontaneous Generation, or Archigony.—Autogony and Plasmogony.—Origin of Monera by Spontaneous Generation.—Origin of Cells from Monera.—The Cell Theory.—The Plastid Theory.—Plastids or Structural-Units.—Cytods and Cells.—Four Different Kinds of Plastids.

In our considerations hitherto we have endeavoured to answer the question, By what causes have new species of animals and plants arisen out of existing species? We have answered this question in so far that on the one hand hybridism, and on the other the natural selection in the struggle for existence—that is, the interaction of the laws of Inheritance and Adaptation—are completely sufficient