in the more perfect animals and plants, seem there so mysterious, so wonderful, so peculiar, that most persons are decidedly of opinion that in inorganic nature there occurs nothing at all similar, or in the least degree comparable to them. Organisms are for this very reason called animate, and the anorgana, inanimate natural bodies. Hence, even so late as the commencement of the present century, the science which investigates the phenomena of life, namely, physiology, retained the erroneous idea that the physical and chemical properties of matter were not sufficient for explaining these phenomena. Nowadays this idea may be regarded as having been completely refuted. In exact physiology, at least, it has now no place. It now never occurs to a physiologist to consider any of the vital phenomena as the result of a mysterious vital force, of an active power working for a definite purpose, standing outside of matter, and, so to speak, taking only the physico-chemical forces into its service. Modern physiology has arrived at the strictly monistic conviction that all of the vital phenomena, and, above all, the two fundamental phenomena of nutrition and propagation, are purely physico-chemical processes, and directly dependent on the material nature of the organism, just as all the physical and chemical qualities of every crystal are determined solely by its material composition. Now, as the elementary substance which determines the peculiar material composition of organisms is carbon, we must ultimately reduce all vital phenomena, and, above all, the two fundamental phenomena of nutrition and propagation, to the properties of the carbon. The peculiar chemicophysical properties, and especially the semi-fluid state of aggregation, and the easy decomposability of the exceedingly