

generation, has been to a great extent, or almost entirely, destroyed. Not sixty years ago, all chemists maintained that we were unable to produce artificially in our laboratories any complicated combination of carbon, or so-called "organic combination." The mystic "vital force" alone was supposed to be able to produce these combinations. When, therefore, in 1828, Wöhler, in Göttingen, for the first time refuted this dogma, and exhibited pure "organic" urea, obtained in an artificial manner from a purely inorganic body (cyanate of ammonium), it caused the greatest surprise and astonishment. In more recent times, by the progress of synthetic chemistry, we have succeeded in producing in our laboratories a great variety of similar "organic" combinations of carbon, by purely artificial means—for example, alcohol, acetic acid, formic acid. Indeed, many exceedingly complicated combinations of carbon are now artificially produced, so that there is every likelihood, sooner or later, of our producing artificially the most complicated, and at the same time the most important of all, namely, the albuminous combinations, or plasson-bodies. By the consideration of this probability, the deep chasm which was formerly and generally believed to exist between organic and inorganic bodies is almost or entirely removed, and the way is paved for the conception of spontaneous generation.

Of still greater, nay, the very greatest importance to the hypothesis of spontaneous generation are, finally, the exceedingly remarkable *Monera*, those creatures which we have already so frequently mentioned, and which are not only the simplest of all observed organisms, but even the simplest of all imaginable organisms. I have already