

spontaneous generation was advocated, it failed at once to obtain adherents on account of the composite structure of the simplest organisms then known. It is only since we have discovered the exceedingly important Monera, only since we have become acquainted in them with organisms not in any way built up of distinct organs, but which consist solely of a single chemical combination, and yet grow, nourish, and propagate themselves, that this great difficulty has been removed, and the hypothesis of spontaneous generation has gained a degree of probability which entitles it to fill up the gap existing between Kant's cosmogony and Lamarck's Theory of Descent.

Only such homogeneous organisms as are yet not differentiated, and are similar to inorganic crystals in being homogeneously composed of one single substance, could arise by spontaneous generation, and could become the primæval parents of all other organisms. In their further development we have pointed out that the most important process is the formation of a *kernel* or *nucleus* in the simple little lump of plasson. We can conceive this to take place in a purely physical manner, by the condensation of the innermost central part of the albumen. The more solid central mass, which at first gradually shaded off into the peripheral plasma, becomes sharply separated from it, and thus forms an independent, round, albuminous corpuscle, the kernel; and by this process the Moneron becomes a *cell*. Now, it must have become evident from our previous chapters, that the further development of all other organisms out of such a cell presents no difficulty, for every animal and every plant, in the beginning of its individual life, is a simple cell. Man, as well as every other animal, is at first nothing but