

In tracing the method of grouping we find Bacteria divided into three groups, Spheres, Rods and Spirals; but two Spheres make a Rod and three Spheres a Spiral, so that it is actually the manner of grouping of the Spheres that brings forth the other two.

Bacteria, as nature's growths, evidence a threefold constructing force in cell life, therefore we will take this number as the "active part," or primal constructing number in protoplasma building.

As chemical affinity is now declared to be electrically directed, we will have to enter the domain of electric energies in order to trace the fundamental principles of Organic Chemistry.

As we have already considered the products of Bacterial growths (nitrogen, hydrogen, carbon dioxide, etc.) to be the "offspring" of the parents of the cell itself, we will have to search for the electrical "offspring" of Nature's growths in order to find the parents of chemical substances.

The electrical theory of matter demands the growth of all forms from the same fundamental units, therefore we must search for this "sameness" in electrical energies given off from all forms of matter.

It was only owing to the discovery of radium that man was able to prove that the same kind of rays were thrown off from all forms of matter. These rays are of three kinds, and evidence their greatest activities in the decomposition of the radium atom.

These three kinds of rays are called negatively charged particles, particles positively charged, and a third kind which is not influenced by a magnet, the other two being deflected by a magnet to a certain extent.

If all forms of matter are giving off these rays as their "ray offspring," the parents of the "offspring" must also be of the same kind of rays.

If the activities of the radium atom are investigated, it is found that a "system" of growth as well as decomposition is at work within the atom. Sir William Ramsay has seen the helium atom formed or grown from the activity during decomposition. If helium is formed, is not negative and positive electricity, or positive particles, also formed, as a "reconstruction" of the decomposed products into the primeval ether? Where does the continuous luminosity and heat arise, except in these two processes of decay and growth?

There is also an emanation arising from the activities during the so-called decomposition of the atom of radium, which is in the nature of a gas. This gas is more wonderful in its activity than are the radium rays, making inactive bodies in its immediate neighborhood become active. This emanation acts the part of a "breath of life," and we have definite proof that the emanation can make that which has been considered dead to become alive or "active."

The radium atom proves to be a system of electricity in continual activity, made up of three different kinds of electrical particles. We are, therefore, warranted in regarding this system as a "centre of control" in a process of decomposition and reconstruction, the