

*nic principle.* Thus, in the vegetable kingdom we have *Lignin, Tannin, Mucilage, Oil, Sugar, Fecula, &c.* The animal kingdom, in like manner, furnishes *Gelatin, Albumen, Fibrin, Mucus, Entomoline, Elearin, Stearin,* and many others.

The chemical constitution of these organic products, formed, as they are, of but few primary elements, is strikingly contrasted with that of the bodies belonging to the mineral kingdom. The catalogue of elementary, or simple bodies, existing in nature, is, indeed, more extensive than the list of those which enter into the composition of animal or vegetable substances. But in the mineral world they occur in simpler combinations, resolvable, for the most part, into a few definite ingredients, which rarely comprise more than two or three elements. In organized products, on the other hand, although the total number of existing elements may be smaller, yet the mode of combination in each separate compound is infinitely more complex, and presents incalculable diversity. Simple binary compounds are rarely ever met with; but, in place of these, we find three, four, five, or even a greater number of constituent elements existing in very complicated states of union.

This peculiar mode of combination gives rise to a remarkable condition, which attaches to the chemical properties of organic compounds. The attractive forces, by which their several ingredients are held together, being very numerous, require to be much more nicely balanced, in order to retain them in combination. Slight causes are sufficient to disturb, or even overset, this equipoise of affinities, and often produce rapid changes of form, or even complete decomposition. The principles, thus retained in a kind of forced union, have a constant tendency to react upon one another and to produce, from slight variations of circumstances, a totally new order of combinations. Thus, a degree of heat, which would occasion no change in most mineral substances, will at once effect the complete disunion of the elements of an animal or vegetable body. Organic substances are, in