

Vegetable substances, in general, contain essentially no more than three elements, *Hydrogen*, *Carbon*, and *Oxygen*; while animal substances usually involve a fourth, *Azote*. Yet there are many vegetable substances, of whose composition, azote forms a considerable part; while certain animal substances are entirely wanting in that principle. It is obvious, therefore, that the mere chemical composition of a substance, at least its essentially consisting of three or of four of these elements, will not enable us to determine whether it be vegetable or animal; and that, in many instances, when this point happens to be doubtful or unknown, we must have other data before we can form a conclusion. Besides the four constituent elements, of which all organic substances are essentially compounds; other principles generally enter into their composition. These other principles are in very minute quantity, and are not so essential to the existence of organic substances, as the four constituent elements above named; yet, however minute the quantity, the influence of these other principles seems to be most important; they are, *Sulfur*, *Phosphorus*, *Chlorine*, *Fluorine*, *Iron*, *Potassium*, *Sodium*, *Calcium*, *Magnesium*, and probably more besides. These principles have, by most chemists, been deemed extraneous, or foreign to organized bodies; but we shall presently show, that there is good reason to believe, that the office of such additional prin-