It was supposed that the simple and well-known elements of these bodies might have the property of forming primarily combinations which were more firmly knit together than others, that these primary combinations might then as it were take the place of elements and act like them, forming with others of similar constitution, or with the simple elements themselves, more complex compounds. In these higher compounds they might behave like elementary bodies, entering into and being expelled from them in their own proper combinations without being broken up into the ultimate elementary constituents. One of the functions of the living organism was by the action of the vital forces to produce these primary compounds or complex atoms. It was thus thought that as inorganic bodies were made up of constituents which were elements, so organic bodies were made up of constituents which were themselves partly compounds. A new term had to be coined for those constituents which might comprise both elementary bodies and these primary compounds which behaved like elements in organic substances. This was the term "Radicle." A radicle might be an element or a compound.[1] For a long time it was thought that these

1815), a compound of carbon and nitrogen, which was shown to behave like an element. Ampère in the following year showed how the salts of ammonia could be brought into line with the salts of other alkalies by considering them to contain a compound element (consisting of nitrogen and hydrogen) in place of a simple element. In his celebrated essay of 1818 Berzelius defines organic acids as binary compounds of oxygen with com-

pound elements or radicles (Kopp, 'Geschichte der Chemie,' vol. iv. p. 269).

[1] The term "radicle," to designate the principal constituent of a compound, was used as far back as 1787 in the discussions through which the French chemists reformed the nomenclature of chemistry (Kopp, 'Geschichte,' &c., vol. iv. p. 266). It acquired a more definite meaning about the year 1835, when Liebig, in common with Ber-