

these constitute the only resources of knowledge to the naturalist in this department. It may also be stated, that most observers, deterred by these difficulties, have passed slightly over the fossil bones of quadrupeds; have classed them in a vague manner, according to superficial resemblances, or have not even ventured to assign them a name; so that this part of the history of fossil remains, although the most important and most instructive of all, is, at the same time, that which has been the least cultivated*.

Principle by which this determination is effected.

Fortunately, comparative anatomy possesses a principle, which, when properly developed, enables us to surmount all the obstacles. This principle consists in the mutual relation of forms in organised beings, by means of which, each species may be determined, with perfect certainty, by any fragment of any of its parts.

Every organised being forms a whole,—a peculiar system of its own, the parts of which mu-

* I do not intend by this remark, as I have already observed on a former occasion, to detract from the merit of the observations of Camper, Pallas, Blumenbach, Scæmmering, Merk, Faugas, Rosenmüller, Home, &c.; but their excellent works, which have been very useful to me, and which I quote throughout, are incomplete; and several of these works have only been published since the first editions of this Essay.