

drawn from their solid parts. In quadrupeds, on the contrary, although we should meet with the whole skeleton, we should have great difficulty in applying to it the characteristics for the most part derived from the hair, colour, and other marks, which disappear before the incrustation; and it is uncommonly rare to find a fossil skeleton at all perfect; bones isolated and confusedly intermingled, most frequently broken and reduced to fragments; this is all with which our layers furnish us in this class, and is the sole resource of the naturalist. Thus we may say that the majority of observers, frightened at these difficulties, have passed lightly over the fossil bones of quadrupeds; have classed them very vaguely, after superficial resemblances; or have not even hazarded the giving a name to them; so that this part of the fossil history, the most important and instructive of all, is of all others the least cultivated. (1)

#### PRINCIPLE OF THIS DETERMINATION.

Fortunately, comparative anatomy possesses a principle, which, properly developed, was capable of clearing up all embarrassment: it was that of the natural relation of forms in organized beings, by means of which each sort of creature may by ri-

(1) I do not pretend by this remark, as well as those already made, to detract from the merit of the observations of Messrs. Camper, Pallas, Blumenbach, Sæmmering, Merk, Faugus, Rosenmuller, Home, &c.; but their estimable labours, which have been very useful to me, and which I have cited every where, are only partial, and many of these labours even published after the first editions of this Discourse.