of small importance in another part; 16—the Character does not constitute the Genus, but the Genus the Character;—the Character is necessary, not to make the Genus, but to recognize it. The vagueness of these maxims is easily seen; the rule of attending to all the parts, implies, that we are to estimate their relative importance, either by physiological considerations (and these again lead to arbitrary rules, as, for instance, the superiority of the function of nutrition to that of reproduction), or by a sort of latent naturalist instinct, which Linnæus in some passages seems to recognize. "The Habit of a plant," he says, 16 "must be secretly consulted. A practised botanist will distinguish, at the first glance, the plants of different quarters of the globe, and yet will be at a loss to tell by what mark he detects them. There is, I know not what look,—sinister, dry, obscure in African plants; superb and elevated, in the Asiatic; smooth and cheerful, in the American; stunted and indurated, in the Alpine."

Again, the rule that the same parts are of very different value in different Orders, not only leaves us in want of rules or reasons which may enable us to compare the marks of different Orders, but destroys the systematic completeness of the natural arrangement. If some of the Orders be regulated by the flower and others by the fruit, we may have plants, of which the flower would place them in one Order, and the fruit in another. The answer to this difficulty is the maxim already stated;—that no Character makes the Order; and that if a Character do not enable us to recognize the Order, it does not answer its purpose, and ought to be changed for another.

This doctrine, that the Character is to be employed as a servant and not as a master, was a stumbling-block in the way of those disciples who looked only for dogmatical and universal rules. One of Linnæus's pupils, Paul Dietrich Giseke, has given us a very lively account of his own perplexity on having this view propounded to him, and of the way in which he struggled with it. He had complained of the want of intelligible grounds, in the collection of natural orders given by Linnæus. Linnæus¹⁷ wrote in answer, "You ask me for the characters of the Natural Orders: I confess I cannot give them." Such a reply naturally increased Giseke's difficulties. But afterwards, in 1771, he had the good fortune to spend some time at Upsal; and he narrates a conversation which he held with the great

¹⁷ Linnæi Prælectiones, Pref. p. xv.