

that he had fully satisfied himself of the real existence of such groups, for he says distinctly in his *Philosophia Botanica*, sect. 169, "Scius characterem non constituere genus, sed genus characterem. Characterem fluere e genere, non genus e characterere. Characterem non esse, ut genus fiat, sed ut genus noscatur."

It is surprising that notwithstanding such clear statements, which might have kept naturalists awake respecting the natural foundation of genera, such loose ideas have become prevalent upon this subject, that at present the number of investigators who exhibit much confidence in the real existence of their own generic distinctions is very limited. And as to what genera really are, the want of precision of ideas appears still greater. Those who have considered the subject at all seem to have come to the conclusion that genera are nothing but groups including a certain number of species agreeing in some more general features than those which distinguish species; thus recognizing no difference between generic and specific characters as such, as a single species may constitute a genus, whenever its characters do not agree with the characters of other species, and many species may constitute a genus, because their specific characters agree to a certain extent among themselves.¹ Far from admitting such doctrines, I hope to be able to show that, however much or however little species may differ among themselves as species, yet they may constitute a natural genus, provided their respective generic characters are identical.

I have stated before, that in order to ascertain upon what the different groups adopted in our systems are founded, I consulted the works of such writers as are celebrated in the annals of science for having characterized with particular felicity any one kind of these groups, and I have mentioned Latreille as prominent among zoölogists for the precision with which he has defined the genera of Crustacea and Insects, upon which he has written the most extensive work extant.² An anecdote which I have often heard repeated by entomologists who knew Latreille well, is very characteristic as to the meaning he connected with the idea of genera. At the time he was preparing the work just mentioned, he lost no opportunity of obtaining specimens, the better to ascertain from nature the generic peculiarities of these animals, and he used to apply to the entomologists for contributions to his collection. It was not show specimens he cared to obtain, any would do, for he used to say he wanted them only "to examine their parts." Have we not here a hint, from a master, to teach us what genera are and how they should be characterized? Is it not the special structure of some part or other, which charac-

¹ SPANNO, Ueber die naturhistorischen Begriffe von Gattung, Art und Abart, Leipzig, 1838, 1 vol. 8vo.

² LATREILLE, Genera Crustaceorum und Insectorum, Paris et Argent. 1806-1809, 4 vols. 8vo.