

nor those of his opponents can be adopted without amendments. As to the suggestion that generic distinctions must be of an absolute character, of course the acquiescence in this demand would place the creation of genera beyond the discretion of classifiers, and thus expel for ever from Science the disputes as to whether this group is to be regarded as a species or as a genus; it is however evident that, strictly and exactly prosecuted, this demand would lead to the most strange and unnatural systematic arrangements. Following it we should be obliged to unite all the Keratosa, with the exception of the genera *Ianthella*, *Darwinella*, and perhaps *Psammopemma* with all Chalinidæ, Renieridæ, perhaps all Monactinellida into a single genus systematically equivalent to that of *Darwinella* or *Ianthella*. For there are no absolute distinctions between *Chalina* or *Reniera* and *Spongelia*, and there are no absolute distinctions between *Spongelia* and *Euspongia* and *Aplysina*, and again there exist such distinctions between most of the Keratosa and Monactinellida on one hand, and *Ianthella*, *Darwinella*, and *Psammopemma* on the other. On the whole, what Prof. Nägeli recommends is applicable only to the palæontologically old groups of plants and animals. But it is not less evident that an unlimited discretion as to the creation of genera would render any systematic progress impossible; to those who feel disinclined to agree with me, I can but recommend an attentive perusal of spongiological systematic literature. The using of a varietal character, as of generic value, conditions the establishment of new apparently highly interesting and deviating species out of forms representing nothing more than by no means instructive varieties, if not individuals of very common species belonging to another genus. It is quite possible that I have myself committed the same mistake, having adopted F. E. Schulze's genus *Hippospongia*, and created a new species *Hippospongia mauritiana*, while this conjectural species is very possibly nothing but a variety or subspecies of *Spongia* (*Euspongia*) *lapidescens*. Both these opinions cannot thus in their entire extension be adopted. In my paper on the Challenger Calcareo an attempt to reconcile them has been made. Whilst subdividing this group into genera I called attention to my intention to execute this task according to the whole of their organisation, by taking into consideration all their organs in their mutual correlation; and with respect to the group just mentioned the carrying out of this principle met no difficulties, and I hope that the genera I have there established are really natural and adoptable. But there are very often cases when such a proceeding is impossible, when large groups of forms differ from one another only in a single character, the conjectural specific distinctions being in one group complete analogues to those in the other. To similar instances the principle I have followed in my above named paper is not applicable, and for my own part I see no other issue but to recommend for such cases the adoption of the scheme of Nägeli, and this in order to protect the establishment of genera so far as possible from the vagaries of classifiers, so that generic unity might serve as a firm basis, which has been wanting in descriptive zoology since the mutability of species was actually proved.