occupying a far more important place than their differences. It is the general establishment of this conviction and its consequences which we have now to follow.

The first writer in whom we find the traces of an arrangement depending upon these natural resemblances, is Hieronymus Tragus, (Jerom Bock,) a laborious German botanist, who, in 1551, published a herbal. In this work, several of the species included in those natural families to which we have alluded,<sup>2</sup> as for instance the Labiatæ, the Cruciferæ, the Compositæ, are for the most part brought together; and thus, although with many mistakes as to such connexions, a new principle of order is introduced into the subject.

In pursuing the development of such principles of natural order, it is necessary to recollect that the principles lead to an assemblage of divisions and groups, successively subordinate, the lower to the higher, like the brigades, regiments, and companies of an army, or the provinces, towns, and parishes of a kingdom. Species are included in Genera, Genera in Families or Orders, and orders in Classes. The perception that there is some connexion among the species of plants, was the first essential step; the detection of different marks and characters which should give, on the one hand, limited groups, on the other, comprehensive divisions, were other highly important parts of this advance. To point out every successive movement in this progress would be a task of extreme difficulty, but we may note, as the most prominent portions of it, the establishment of the groups which immediately include Species, that is, the formation of Genera; and the invention of a method which should distribute into consistent and distinct divisions the whole vegetable kingdom, that is, the construction of a System.

To the second of these two steps we have no difficulty in assigning its proper author. It belongs to Cæsalpinus, and marks the first great epoch of this science. It is less easy to state to what botanist is due the establishment of Genera; yet we may justly assign the greater part of the merit of this invention, as is usually done, to Conrad Gessner of Zurich. This eminent naturalist, after publishing his great work on animals, died of the plague in 1565, at the age of forty-nine, while he was preparing to publish a History of Plants, a sequel to his History of Animals. The fate of the work thus left un-

<sup>&</sup>lt;sup>2</sup> Sprengel, i. 270.

<sup>&</sup>lt;sup>3</sup> Cuvier, Leçons sur l'Hist. des Sciences Naturelles, partie ii. p. 193.