

To some persons it may appear that this arbitrary distribution of the vegetable kingdom, according to the number of parts of a particular kind, cannot deserve to be spoken of as a great discovery. And if, indeed, the distribution had been arbitrary, this would have been true; the real merit of this and of every other system is, that while it is artificial in its form, it is natural in its results. The plants which are associated by the arrangement of Cæsalpinus, are those which have the closest resemblances in the most essential points. Thus, as Linnæus says, though the first in attempting to form natural orders, he observed as many as the most successful of later writers. Thus his *Legumina*<sup>11</sup> correspond to the natural order *Leguminosæ*; his *genus Ferulaceum*<sup>12</sup> to the *Umbellatæ*; his *Bulbaceæ*<sup>13</sup> to *Liliacæ*; his *Anthemides*<sup>14</sup> to the *Compositæ*; in like manner, the *Boraginæ* are brought together,<sup>15</sup> and the *Labiataæ*. That such assemblages are produced by the application of his principles, is a sufficient evidence that they have their foundation in the general laws of the vegetable world. If this had not been the case, the mere application of number or figure alone as a standard of arrangement, would have produced only intolerable anomalies. If, for instance, Cæsalpinus had arranged plants by the number of flowers on the same stalk, he would have separated individuals of the same species; if he had distributed them according to the number of leaflets which compose the leaves, he would have had to place far asunder different species of the same genus. Or, as he himself says,<sup>16</sup> "If we make one genus of those which have a round root, as Rapum, Aristolochia, Cyclaminus, Aton, we shall separate from this genus those which most agree with it, as Napum and Raphanum, which resemble Rapum, and the long Aristolochia, which resembles the round; while we shall join the most remote kinds, for the nature of Cyclaminus and Rapum is altogether diverse in all other respects. Or if we attend to the differences of stalk, so as to make one genus of those which have a naked stalk, as the Junci, Cæpe, Aphacæ, along with Cicoracæ, Violæ, we shall still connect the most unlike things, and disjoin the closest affinities. And if we note the differences of leaves, or even flowers, we fall into the same difficulty; for many plants very different in kind have leaves very similar, as Polygonum and Hypericum, Ernea and Sesamois, Apium and Ranunculus; and plants of the same genus have sometimes very different

<sup>11</sup> Lib. vi.<sup>12</sup> Lib. vii.<sup>13</sup> Lib. x.<sup>14</sup> Lib. xii.<sup>15</sup> Lib. xi.<sup>16</sup> Lib. i. cap. xii. p. 25.