conviction had never been acted upon so as to produce a distinct and adequate descriptive botanical language. Jung, indeed, had already attempted to give rules and precepts which should answer this purpose; but it was not till the Fundamenta Botanica appeared, that the science could be said to possess a fixed and complete terminology.

To give an account of such a terminology, is, in fact, to give a description of a dictionary and grammar, and is therefore what cannot here be done in detail. Linnæus's work contains about a thousand terms of which the meaning and application are distinctly explained; and rules are given, by which, in the use of such terms, the botanist may avoid all obscurity, ambiguity, unnecessary prolixity and complexity, and even inelegance and barbarism. Of course the greater part of the words which Linnæus thus recognized had previously existed in botanical writers; and many of them had been defined with technical precision. Thus Jung' had already explained what was a composite, what a pinnate leaf; what kind of a bunch of flowers is a spike, a panicle, an umbel, a corymb, respectively. Linnaus extended such distinctions, retaining complete clearness in their separation. Thus, with him, composite leaves are further distinguished as digitate, pinnate, bipinnate, pedate, and so on; pinnate leaves are abruptly so, or with an odd one, or with a tendril; they are pinnate oppositely, alternately, interruptedly, articulately, decursively. Again, the inflorescence, as the mode of assemblage of the flowers is called, may be a tuft (fasciculus), a head (capitulum), a cluster (racemus), a bunch (thyrsus), a panicle, a spike, a catkin (amentum), a corymb, an umbel, a cyme, a whorl (verticillus). And the rules which he gives, though often apparently arbitrary and needless, are found, in practice, to be of great service by their fixity and connexion. By the good fortune of having had a teacher with so much delicacy of taste as Linnæus, in a situation of so much influence, Botany possesses a descriptive language which will long stand as a model for all other subjects.

It may, perhaps, appear to some persons, that such a terminology as we have here described must be enormously cumbrous; and that, since the terms are arbitrarily invested with their meaning, the invention of them requires no knowledge of nature. With respect to the former doubt, we may observe, that technical description is, in reality, the only description which is clearly intelligible; but that technical language cannot be understood without being learnt as any other lan-

³ Isagoge Phytoscopica, 1679.

Sprengel, ii. 28.