

The subject of Botany is less rigidly defined. It is, of course, generally held to be the study of the vegetable kingdom, but the mode in which it is discussed varies according to the aspect in which it is viewed. In Medical Schools, *e.g.* attention is particularly directed to the properties of plants, and the subject of structure is gone into only sufficiently far to enable medical men to discriminate between such plants as are useful as remedial agents, and such as are not so; such as are poisonous, and such as are harmless. This, though an important, is but one of the partial modes of studying Botany, and the plan pursued in places where it is taken up as a science, is to view the vegetable kingdom as a unity, to consider in their relative importance, the composition of plants, the functions and structure of their parts, and their properties as seen in their uses to, or ill effects upon, animals, and hence to deduce philosophical rules, by which the multiplied forms of vegetables may be classed as one great department of nature for the convenient study of man, in what direction soever he may seek to apply his knowledge.

If any thing like a correct idea of the objects of Botany has been conveyed in the few preceding words, we are at once in a position to see that difficulty may arise, when it is made something apart from Natural History, as to what the latter term includes. It is upon this point that, as I have already observed, there is found very considerable diversity of opinion, and we have only to look at the groups into which natural objects almost spontaneously fall, in order to see that the history of nature must be read, as it were, in different chapters, each of which shall treat of some particular set of things; and the difficulty appears to lie in deciding which of these chapters should go together, if all are not taken into consideration, in order to present the least imperfect idea of the entire subject.

The objects we meet with in nature on the surface of the globe, either have or have not life; those which live must be either vegetables, and be discussed in Botany, or else animals, and must be studied in what is called Zoology. Natural objects without life are minerals and rocks, and their particular study is therefore divided into Mineralogy, and, in a partial sense, Geology, or more correctly Petralogy. If we penetrate below the surface of the earth we find no life, but we meet with abundant evidence that it has once existed, and in very different forms from those now possessed on our globe; the study of these forms, and the causes which have placed them where we find them, and given the present conditions to our earthly habitation, of sea and land, with the arrangement of its mineral contents within, and the surface distribution of its animals and vegetables, is properly termed Geology; and a moment's reflection shows that this term, used in its right sense, really means Natural History — neither more nor less; this meaning, however, has only recently been given to Geology, which has been held to be the separate study of rocks and fossils. In proof of what I said of the difference of opinion on these subjects, I may mention that in Edinburgh and Glasgow Natural History includes Zoology, Mineralogy and Geology, to the exclusion of Botany;