

than those which determine their place in the Linnæan or any similar system; a community of character extending over the whole habit and properties of the individuals compared. The important chemical discoveries which have been lately made of peculiar proximate principles which, in an especial manner, characterize certain families of plants, hold out the prospect of a greatly increased field of interesting knowledge in this direction, and not only interesting, but in a high degree important, when it is considered that the principles thus brought into view are, for the most part, very powerful medicines, and are, in fact, the essential ingredients on which the medical virtues of the plants depend. The law of the distribution of the generic forms of plants over the globe, too, has, within a comparatively recent period, become an object of study to the naturalist; and its connection with the laws of climate constitutes one of the most interesting and important branches of natural-historical inquiry, and one on which great light remains to be thrown by future researches. It is this which constitutes the chief connecting link between botany and geology, and renders a knowledge of the vegetable fossils, of any portion of the earth's surface, indispensable to the formation of a correct judgment of the circumstances under which it existed in its ancient state. Fossil botany is accordingly cultivated with great and increasing ardor; and the subterraneous "Flora" of a geological formation is, in many instances, studied with a degree of care and precision little inferior to that which its surface exhibits.