

BOTANY.

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1. The universe consists of *matter* and *mind*. By the faculties of mind with which God has endowed us, we are able to examine into the properties of the material objects by which we are surrounded. If we had no sciences, nature would present the same phenomena as at present. The heavenly bodies would move with equal regularity, and preserve the same relative situations, although no system of astronomy had been formed. The laws of gravity and of motion would operate in the same manner as at present, if we had no such science as natural philosophy. The affinities of substances for each other were the same, before the science of chemistry existed, as they are now. The characters which distinguish families of plants, and the laws of the vegetable kingdom, do not depend on the discoveries of botanical science. It is a truth which cannot be too much impressed upon the mind, in all scientific investigations, that no system of man can change the operations of nature; though by systems we are enabled to gain and perfect knowledge of these laws and relations.

2. The Deity has not only placed before us an almost infinite variety of objects, but has given to our minds the power of reducing them into classes, so as to form beautiful and regular systems, by which we can comprehend, under a few terms, the vast number of individual things, which would, otherwise, present to our minds a confused and indiscriminate mass. This power of the mind, so important in classification, is that of discovering resemblances. We perceive two objects, we have an idea of their resemblance, and we give a common name to both: other similar objects are then referred to the same class, or receive the same name. A child sees a flower, which he is told is a rose; he sees another resembling it, and nature teaches him to call that, also, a rose. On this operation of the mind depends the power of forming classes, or of generalizing. Some relations or resemblances are seen at the first glance; others are not discovered until after close examination and reflection: but the most perfect classification is not always founded upon the

most obvious resemblances. A person ignorant of botany, on beholding the profusion of flowers which adorn the face of nature, would discover general resemblances, and form in his mind some order of arrangement: but the botanist learns to distinguish the least conspicuous parts of the plant as most important in a system of classification.

3. *System* is necessary in every science. It not only assists in the acquisition of knowledge, but enables us to retain what is thus acquired; and, by the laws of association to call forth at will what is treasured up in the storehouse of the mind. System is important, not only in the elevated departments of science, but is essential in the common concerns of every day life. In conducting any kind of business, and in household operations, it is indispensable to the success of the one, and the comfort of those interested in the other.—The logical and systematic arrangement which prevails in Botanical science, has a tendency to produce the habit and love of order. Whoever traces this system through its various connections, by a gradual progress through individual plants to general classes, and then descends, in the same methodical manner, from generals to particulars, must acquire a habit of arrangement, and a perception of order, which is the true practical logic.

4. *The study of Botany seems peculiarly adapted to females.* The objects of its investigation are beautiful and delicate; its pursuit, leading to exercise in the open air, is conducive to health and cheerfulness. It is not a sedentary study, which can be acquired in the library: but the objects of the science are scattered over the surface of the earth, along the banks of the winding brooks, on the borders of precepices, the sides of mountains, and in the depths of the forest. A knowledge of botany is necessary to the medical profession. Our Almighty benefactor, in bestowing upon us the vegetable tribes, has not only provided a source of refined enjoyment in the contemplation of their beautiful forms and colours, and in their fragrance, by which, in their peculiar lan-