

sented in every part of the vegetable kingdom, whether they be considered with reference to their direct utility for the support of individual life, and the continuance of the species, or whether they be viewed as component parts of that beauty which is spread over the scenery of nature, and is so delightfully refreshing to the eye of every beholder alive to its fascinating charms. How enchanting are all the varieties of flowers, that decorate in gay profusion every part of the garden of creation; and into which the farther we carry our philosophic scrutiny, the more forcibly will our hearts be impressed with the truth of the divine appeal that "EVEN SOLOMON, IN ALL HIS GLORY, WAS NOT ARRAYED LIKE ONE OF THESE."

§ 3. *Development of Vegetables.*

FARTHER proofs of design may be collected from an examination into the modes in which these structures, so admirably adapted to their objects, have been gradually formed. Confining our attention to vascular plants, in which the process of development has been studied with the greatest attention and success, we find that Nature has pursued two different plans in conducting their growth.* In the greater number the successive additions to the substance of the stem are made on the exterior side of the parts from which they proceed. This mode is adopted in what are called *Exogenous plants*. In others, the growth is the result of additions made internally; a plan which is followed in all *Endogenous plants*. The Oak, the Elm, the Beech, the Pine, and all the trees of these northern regions, belong to the first of these divisions. The Palm tribe, such as the Date, the Cocoa-nut tree, and indeed, a large proportion of the trees of tropical climates, together with the sugar-cane, the bamboo, and all gramineous and liliaceous plants, belong to the latter. We shall first inquire into the endogenous

* The tribe of *Filices*, or ferns, the structure of which is vascular, constitute an exception to this rule: as they differ in their mode of development, both from exogenous and endogenous plants.