

The production of wax is also explained :—

“This powder (*pollen*) is collected by the bees ; and is formed by some secret process in their bodies into wax ; which is a singular species of vegetable oil, rendered concrete by a peculiar acid in the insect.”

In discussing the uses of the several parts of the flower he says :—
“We cannot believe, with most botanists, that the corolla has no other use in the vegetable economy than merely to cover and guard the sexual organs. An artery belongs to each portion of the corolla ; which conveys the vegetable blood to the extremities of the petal, there exposing it to the *light* and to the *air*, under a delicate membrane ; when it often changes its color, and is seen beautifully in partly-colored tulips and poppies. It is presumed that this breathing and circulating structure has for its end the sustenance of the anthers and stigma ; as well as for the elaboration of honey, wax and essential oil ; and for perfecting the prolific powder.”

He thus describes Linnaeus's theory of fructification :—“The medullary part of the plant, that is to say, the pith, must be joined with the external or cortical part, for the purpose of producing a new one. If the medulla be so vigorous as to burst through its containing vessels and thus mix with the cortical part, a bud is produced ; otherwise, the medulla is extended until it terminates in the pistillum ; and the cortical part is likewise elongated till it terminates in the antheræ.”

Such are a few of the lessons taught to our first botanists. Many others might have been instanced, but these are sufficient to give an idea of the obscurity of many of the points. In the anatomy of the plants he is as proficient as we are at the present day, and the descriptions are exactly such as will be found in our text books ; it is in the physiology of vegetable life that he fails, and it is here that all the progress has been made since that time.

One thing particularly noticeable is the excellence of the language and composition, and the care shown in the arrangement of each lecture ; also the success of his efforts to make them interesting and attractive. To give you an idea of this feature of his work, it will not be out of place to conclude with the following extract from one of his lectures.