

ture be improved more and more. The industrious farmer would thus reap the fair reward of his toil; and an encouraging prospect be thus opened up to stimulate him to farther exertion.

CRESINUS.

ON BOTANY.

CHAP. I.

ON THE STRUCTURE OF PLANTS.

Mr. Editor.

In conformity with my plan as described in your last number, I now resume the subject of the study of Botany, commencing with that part of the science which properly forms the first object of attention to the beginner, namely, *The structure of Plants*. In treating on this part of the subject it is necessary to reduce it into as few divisions as possible, in order not to perplex and distract the attention of the juvenile student, with too many terms which often tend more to confuse than illustrate the elementary parts of a science. But as the classification of plants depends upon the structure of some parts of them it is necessary for the student to be well acquainted with the structure of those parts, as without this knowledge he would never be able to place any plant he might meet with under its proper class, order or species—and without his being able to do this he could never learn and retain in his mind the names of all the various plants which the vegetable world presents to his view, far less could he in scientific language give a correct description of any new plant which accident might throw in his way.

Botanists have described three parts as essentially necessary to every vegetable body. 1st. A *root* comprehending all that part which is placed under ground. 2d. A *stem* which includes the stalks, branches and leaves. 3d. The *parts of fructification* which include the flower in all its stages from its first appearance till its decay and the seeds and seed vessels from their first formation till they be perfectly ripe.

I shall adopt this division and arrangement in describing these different parts; and although they at first view seem not to include every part of a plant, an acquaintance with them will be found to comprehend all that is essential for the beginner to know.

Section first, of Roots.—The root of a plant has been by philosophers defined “that part of it by which it imbibes nourishment from the soil; and which fixes it to one spot,” but although the accuracy of this cannot be doubted; viewing the subject as a Botanist, the former definition namely “that part of a plant which is under ground” seems to be all that is requisite.

Writers on this science have enumerated a great many varieties of roots, but for the beginner it is totally unnecessary to enter upon all the minute distinctions they have mentioned. There appears to be only five distinct kinds possessing sufficient marks of discrimination to