BOOK XVII.

PHYSIOLOGY AND COMPARATIVE ANATOMY.

VEGETABLE MORPHOLOGY.

Morphology in Linnœus.

I HAVE stated that Linnaus had some views on this subject. Dr. Hooker conceives these views to be more complete and correct than is generally allowed, though unhappily clothed in metaphorical language and mixed with speculative matter. By his permission I insert some remarks which I have received from him.

The fundamental passage on this subject is in the Systema Nature; in the Introduction to which work the following passage occurs:—

"Prolepsis (Anticipation) exhibits the mystery of the metamorphosis of plants, by which the herb, which is the *larva* or imperfect condition, is changed into the declared fructification: for the plant is capable of producing either a leafy herb or a fructification.

"When a tree produces a flower, nature anticipates the produce of five years where these come out all at once; forming of the bud-leaves of the next year bracts; of those of the following year, the calyx; of the following, the corolla; of the next, the stamina; of the subsequent, the pistils, filled with the granulated marrow of the seed, the terminus of the life of a vegetable."

Dr. Hooker says, "I derive my idea of his having a better knowledge of the subject than most Botanists admit, not only from the *Prolepsis*, but from his paper called *Reformatio Botanices* (Amæn. Acad. vol. vi.); a remarkable work, in respect of his candor in speaking of his predecessors' labors, and the sagacity he shows in indicating researches to be undertaken or completed. Amongst the latter is, V. 'Prolepsis plantarum, ulterius extendenda per earum metamorphoses.' The last word occurs rarely in his *Prolepsis*; but when it does it seems to me that he uses it as indicating a normal change and not an accidental one.