

derived from free-living individuals of the ancestral algal form, but has a distinct phylogenetic history as an interpolated stage in the life-history."

Though there remains this difference of opinion as to the nature of the alternation, the unification which has resulted from the recognition of metagenesis has been perhaps the greatest achievement of morphological botany.

Hofmeister's main work was an elucidation of the comparative embryology of the moss-like, fern-like, and flowering plants—the Bryo-
phytes, Pteridophytes, and Spermaphytes. It was for others to follow his example by a study of the Thallophytes—the Algæ, Fungi, and Lichens.

In regard to the Algæ, a systematic basis had been supplied by such labours as those of the Agardhs, William Harvey, and Kützing; and important observations on their reproduction had been made by Vaucher, Nägeli, Braun, and others. After Hofmeister's work, however, the study of Algæ rose greatly in morphological dignity in the hands of investigators like Pringsheim, Cohn, Thuret.

But the series of Algæ is so immense that even now, after forty or fifty years of steady work, there seems little certainty as to the affinities of the several groups.

In the sixteenth century Hieronymus Bock still spoke of Fungi "as merely the superfluous moisture of the earth and trees, of rotten wood, and other rotten things". "About the middle of the seventeenth century", Sachs says, "Otto von Münchausen thought that mushrooms were the habitations of Polypes, and Linnæus assented to that view." Similar notions existed till late into our own century; in fact, Fungi were almost the last organisms to be in any degree mastered by the naturalist. It almost follows from this that there is no department of botany which has made greater strides during the Victorian era than the study of Fungi. In a presidential address to the botanical section of the British Association (1897), Prof. Marshall Ward outlined the history in masterly fashion:—