

part covered by eternal snow, on which no plant could thrive—are encrusted by the dry bodies of Lichens.

Leaving now the Fungi, Lichens, and Algæ, which are comprised under the name of Thallus plants, we enter upon the second sub-kingdom of the vegetable kingdom, that of the *Prothallus plants* (Prothallophyta), which by some botanists are called phyllogonic Cryptogamia (in contradistinction to the Thallus plants, or thallogonic Cryptogamia). This sub-kingdom comprises the two provinces of *Mosses* and *Ferns*.

Here we meet with (except in a few of the lowest forms) the separation of the vegetable body into two different fundamental organs, axial-organs (stem and root) and leaves (or lateral organs). In this the Prothallus plants resemble the Flowering plants, and hence the two groups have recently often been classed together as stemmed plants, or Cormophytes.

But, on the other hand, Mosses and Ferns resemble the Thallus plants, in the absence of the development of flowers and seeds, and even Linnæus classed them with these, as Cryptogamia, in contradistinction to the plants forming seeds; that is, flowering plants (Anthophyta or Phanerogamia).

Under the name of "Prothallus plants" we combine the closely-related Mosses and Ferns, because both exhibit a peculiar and characteristic "alternation of generation" in the course of their individual development. For every species exhibits two different generations, of which the one is usually called the *Prothallium*, or *Fore-growth*, the other is spoken of as the *Cormus*, or actual *Stem* of the moss or fern.

The first and original generation, the Fore-growth, or Pro-