

in spring coating damp walls and banks, and long mistaken for species of algæ (figs. 1, 2, 3). From various cells of this, young



Fig. 1. Spore of *Funaria hygrometrica*.



Fig. 2. Spore of *Funaria hygrometrica* germinating.

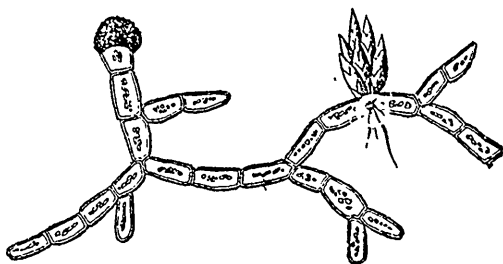


Fig. 3. Prothallium and young plant.

plants are developed, whose fine radicles penetrate the soil; their leaves shoot up, and they become like the parent from which the spore emanated; and being now capable of maintaining an independent existence, the prothallium, no longer needed, dies away, except in a few minute annual mosses of delicate texture, where it is persistent during their whole life. But some mosses rarely produce fruit; yet it is necessary that their reproduction should be ensured, and we find prothallium also developed from tubercles on the roots, from gemmæ or buds occurring on the leaves, or even from the cell-tissue of leaves themselves; while in some mosses a portion of the leaves become altered into gemmæ, and clustered in a head on the top of a naked stalk called a pseudopodium, as in *Tetraphis pellucida* and in *Aulacomnium* (fig. 4).



Fig. 4. Pseudopodium of *Aulacomnium androgynum*, with one of the gemmæ.

THE ROOTS.—These are slender fibrils, by which the plants are