

ing short of jubilant when I ended the season with 30 species; this number rose in 1907 to 34 and in 1909 to 37.

Ferns have a great liking for limestone, and almost my first expedition was to a creek flowing from Bass Lake to the Lower Rideau. Its course is little more than a mile long, first through beaver-meadows and then through pastures, where the stream is shaded with trees and flanked on one side by limestone cliffs ranging from 2 or 3 to 20 feet in height. Refreshing myself at a natural well in the rock on the near bank of the stream, I stepped across, scrambled up the loose talus and examined the shaded wall of limestone above. If you are not a fern lover you cannot share my feelings when I tell you I was standing within arm's length of 3 new species.

On the upper side of the topmost ledge stood a dense mass of Polypody, forming a natural coping-stone, as it were, to the rock wall. Beneath some lower ledges and in the horizontal seams were tufts of Black Spine-wort (*Asplenium Trichomanes*); while further in the shade, beneath some cedars that grew above the rock and behind two maples that grew up from below was a mass of tangled leaves—what could they be? some sort of dock? no! there were lines of spore-cases on the under side; it was the Walking Leaf (*Camptosorus rhizophyllus*), and, as though to put itself beyond suspicion or a doubt, it was actually walking; I got a plant three of whose fronds had regained the moss on the face of the cliff, rooted and given rise to plants of their own.

The Walking Leaf must have shade. It is fond of limestone, but in deeply-shaded damp woods I have found it growing on sandstone, and if you slash the woods and mutilate its sylvan bowers, letting in the sunlight, it will soon disappear even from its favorite limestone shelves. Its foliage has not the glossy finish of its congener, the Hart's Tongue, but its quaint growth and a certain local rarity about it will always attract attention.

The tendency of the long tapering frond with its sensitive tip to regain the mossy bed from which it sprang, seems like an instinct closely analogous to the blind groping movements of certain lower forms of marine life; true the tentacle thrust forth by the plant to search for the wall of its sea-cave swims in a more palpable element, the ocean of air, but it serves the same purpose. The act is doubtless not a conscious one in either case, but in both alike sensation is involved. Not seldom when the frond has reached outwards to a distance from the rock and takes a long time to return, the auricles at the base of the frond are found stretching out blind hands in the shape of similar sensitive tentacles. The great blocks of limestone that fill the Niagara gorge are often densely carpeted with the Walking Leaf, the