

possibility of some kind of system in plants analogous to the nervous system in animals, but simply regard them as involuntary, spontaneous, natural responses. In animals we term such actions instinctive for the reason that we can observe the working of a brain power, and knowing the function we are satisfied that they are instinctive. People who are familiar with the growth of plants in rooms have had occasion to observe their desire to turn to the light. Thus they are enabled to make the best of the unnatural conditions; they must indeed succeed in obtaining as much light as possible, or they will die. What compels the plant to this action? Grain that has been laid flat on the ground after a storm, or heavy rain, will begin to grow erect after a few hours, and, under normal circumstances, it will "get up" sufficiently to produce its seeds. The sole object of grain is to produce seeds, and the plants endeavor to perform this purpose at all costs. When examining grain that is rising up again we notice that the stem bends in the nodes until it is quite erect. The nodes here act similarly to the joints in animals. Physiologically this is simply an expansion and contraction of certain cells in the nodes. Nature, I presume, is responsible for this function? Climbing plants (*Wisteria*, *Hedera*, etc.), send out their flower-bearing shoots far beyond the shade of their leaves, and if prevented in this movement by a repeated tucking of these shoots underneath others, the plant will postpone the opening of the flowers for a considerable time until it succeeds in getting towards the light; if, however, continued, the flowers will eventually open, the plant doing then its utmost to become fertilized. These movements in plants which are often strongly perceptible, make the observer realize that they serve some purpose, and this action to fulfill a set aim is simply natural. Is it? The plant growing towards the light, the grain "getting up" after a storm, both to escape destruction, the climbing plants anxiously endeavouring to become fertilized, are these merely physiological functions, or are they instinctive? Is this really wonderful or is it simply nature? But why then are similar functions in man and animals, intellect or instinct, not simply nature? Nature then is the motive in plants which performs wonderfully intelligent feats—as they are not capable of reasoning? We have often seen recorded most surprising feats performed by domesticated and wild animals in their search after food. Now consider for a moment the germinating *Cuscuta*. The coil contained in the seed pushes to the surface when germinating and the top revolves slowly, snake-like, erect, until it spies a suitable host plant to which it may attach itself and find food ready and available upon which to maintain itself. This parasitic plant finds no food in the soil and must succeed in