

In a newly-published work, entitled "Movements of Plants," Mr. CHARLES DARWIN gives the results of his latest investigations into the question of botanic life. These researches are of a nature which cannot fail to excite general interest, while they will be "like an eagle in a dovecot" to those who cling to the venerable belief in a distinct line of demarcation between the animal and vegetable kingdoms. Mr. DARWIN has in previous works sought to show the unity of natural laws with regard to plants and animals, and in his new book he gives additional evidence in support of his views. Speaking from careful experiment, the author tells us how plants exhibit many of the characteristics of animal nature. They sleep, they move, they are very sensitive, they have appetites, they are carnivorous, and they have radicles which by their sensibility and their effect upon other parts of the plant act a part similar to that of brain in lower animals. We are told that the leaf of a carnivorous plant which has been motionless for hours will instantly curve on being touched in the most delicate manner with a piece of raw beef. In observing the sleeping habits of certain plants, Mr. DARWIN by an ingenious contrivance held down the leaves which otherwise would have returned to a vertical or sleeping position at night. The result was that those leaves were frost-bitten in a temperature which had no such effect on the leaves that were allowed freedom to sleep. Mr. DARWIN thence concludes that the sleeping of the plant is to it a "question of life and death," the vertical position of the leaves at night protecting it from injurious effects of radiation and cold. Not less instructive and suggestive are the researches into the effects of light upon certain forms of vegetation. Instances are given of the wonderful sensitiveness of some plants to light. The seedlings of the *Phalaris canariensis*, for example, are said to have a power of detecting differences in light which are inappreciable by the human eye, while they sympathetically turn to the minutest point of light. Nor is the constant motion of plants confined to any special state of germination, for we learn that from year to year since the tree first began to rise through the ground, the tip of each rootlet endeavours to sweep small ellipses or circles, as far as the surrounding earth permits. All this would seem to show that when we speak of flowers "peeping," "smiling," and "drinking dew," we express something more than a mere poetical metaphor.