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The POWER OF MOVEMENT IN PLANTS. By Charles Darwin, LL.D., F. R. S. Assisted by Francis Darwin. Illustrated. New York: D. Appleton & Co. 1 vol., Svo. $2.

The title of this work indicates its character. Its object is to describe and connect together several large classes of movement common to most plants. To speak of the methods of treatment adopted is wholly uncalled for in notice of a treatise by Darwin. It may be stated, however, that after holding that the most widely prevalent movement is essentially of the same nature as that of the stem of a climbing plant, which bends successively to all points of the compass, so that the tip revolves, he adopts the doctrine that the movement is only due to increased growth, first on one side and then on another in a secondary sense, and that the primary cause is the increased turgescence of the cells, together with the extensibility of their walls.

He shows then that every growing part of every plant is continually circumnutating, even the stems of seedlings before they have broken through the ground. The author adds what may be taken as the meat of the whole treatise:

"In this universally present movement we have the basis or ground work for the acquirement, according to the requirements of the plant, of the most diversified movements. Thus, the great sweeps made by the stems of twining plants, and by the tendrils of other climbers, result from a mere increase in the amplitude of the ordinary movement of circumnutation. The position which young leaves and other organs ultimately assume is acquired by the circumnutating movement being increased in some one direction. The leaves of various plants are said to sleep at night, and it will be seen that their blades then assume a vertical position through modified circumnutation, in order to protect their upper surfaces from being chilled through radiation.

The movements of various organs to the light, which are so general throughout the vegetable kingdom, and occasionally from the light, ,or transversely with respect to it, are all modified forms of circumnutation; as again are the equally prevalent movements of stems, etc., towards the zenith, and of roots towards the center of the earth.

In accordance with these conclusions, a considerable difficulty in the way of evolution is in part removed, for it might have been asked, How did all their diversified movements for the most different purposes first arise? As the case stands, we know that there is always movement in progress, and its amplitude, or direction, or both, have only to be modified for the good of the plant in relation with internal or external stimuli."