

The Power of Movement in Plants. By Charles Darwin, LL.D., F.R.S. assisted by Frank Darwin. New York: D. Appleton & Co. Price, \$2.00. For sale by Judd.

We cannot attempt anything more than a mere notice of this book. The greater part consists of a mass of scientific facts of great importance which have been gathered, we may be sure, by methods of the most pains-taking diligence. In order to aid the general reader who will be interested more in the conclusion than in the laborious record of investigation, the conclusions of each chapter are printed in larger type than the rest. The preface states the ingenious plan which was devised for observing the movement of plants and the way in which the numerous sketches of their motion were drawn. The book shows in the results of the careful work for which the author has long been known, "that apparently every growing part of every plant is continually circumnutating, though often on a small scale. Even the stems of seedlings before they have broken through the ground, as well as their buried radicles, circumnutate, as far as the pressure of the surrounding earth permits. 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. These classes of movement consist of those due to epinasty and hyponasty, those proper to climbing plants, commonly called revolving nutation, the sleep movements of leaves and cotyledons, and the two immense classes of movement excited by light and gravitation." There is an interesting hint in a few words near the end: "It is impossible not to be struck with the resemblance between the foregoing movements of plants and many of the actions performed unconsciously by the lower animals. The habit of moving at certain periods is inherited both by plants and animals; and several other points of similitude have been specified. But the most striking resemblance is the localisation of their sensitiveness, and the transmission of an influence from the excited part to another which consequently moves. Yet plants do not of course possess nerves or a central nervous system; and we may infer that with animals such structures serve only for the more perfect transmission of impressions, and for the more complete intercommunication of the several parts."