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Of all our living men of science none have laboured longer and to more splendid purpose than Mr. Darwin. It is more than forty years since the publication of the "Narrative of the Voyage of the Beagle" placed him in the first rank of naturalists. Since that event he has produced work after work, each of them truly "speak-making," and marked at once by unique originality, endless ingenuity in experimenting, and matchless industry. His monographs, remarkable though they are, will form his only monument; his name is identified with a theory which is confidently predicted by many scientific men will be spoken of in after ages as Newton's theory of gravitation or Kepler's laws are now mentioned. At the age of seventy-one Mr. Darwin has just produced another work, which is not less interesting and curious than its predecessors, and which, if it cannot be doubted, is destined to mark an era in biological science. The drift of much of his recent labour has been to break down the sharp divisions supposed to exist between the animal and vegetable kingdoms. Plants and animals are, in his pages, brought under the operation of the same great laws. Most of the fanciful peculiarities of the latter are shown to be shared by the former. Plants move; they are sensitive; they have appetites; they are carnivorous. We learn from his new book how they sleep, how certain leaves, like the peaty or the rose, rise in the evening and sink in the morning, and how there are plants which take pains to avoid the light. The leaves of plants and animals have acquired habits of moving at stated periods, and that many of the actions of the former closely resemble the unconscious movements of the latter. The tips of the radicles of plants are so sensitive, their influence on all adjoining parts is so great, that, as Mr. Darwin tells us, they act like the brains of the lower animals. What strange revelations of functions may we not expect as these investigations proceed, when we learn that the most important of all the sense-organs of man is not a sense-organ at all, but an organ of sense? The "Loves of the Plants," as magnificently sung by Mr. Darwin's grandfather, do not seem so fabulous and fanciful after all, when the latest and subtlest applications of the vegetable world are disclosed by the grandson. In short, Mr. Darwin has shown, to the discredit of old notions, that unity reigns where it was imagined there were diversity and confusion. His latest book, "The Movements and Habits of Climbing Plants," just published by Mr. Murray, constitutes the investigations described in "Movements and Light," and helps to complete the revolution which Mr. Darwin has for years been working in the domain of botany.

To most minds these researches will open new vistas and give fresh significance to common things. No plant, no part of an organ of it, we see, is at rest; all is in motion, and in motion in the same manner; even before the seedling has broken through the ground this universal "circumnutating " movement, this growing of cells, first on one side, then on another, begins. Gravitation affects this movement; so does light, guiding the seed upward, it may be, through a crack in the ground or a mass of overlying vegetation. But always this circumnutating or revolving movement in each shoot, petiole, and leaflet goes on, and "if we could look beneath the ground, and our eyes had the power of a microscope, we should see the tip of each rootlet endeavouring to swamp small ellipses or circles, as far as the pressure of the surrounding earth permitted. All this astonishing amount of movement has been going on from year to year since the time when, as a seedling, the tree first emerged from the ground." A beautiful unity is thus recognized as prevailing in the growth of all plants and all their parts. The waves made by the stipes and tendrils of climbing plants, the movements of leaves at night, or the advances of the organs of plants towards the light, are but modifications of the movements observed by the buried seeds. Science has told in modern times many strange tales, and has deciphered similarity in things far apart. It has found likeness between the properties of the stinging nettle and the muscle of the highest organized animals. It professes to have discovered a common substance as the basis of all forms of life. But it has not revealed for many a day more novel prospects, more surprising unities, than those which Mr. Darwin discloses or explains in his latest work.