

flowers," as Linnæus calls them, he observes that they are such as have their pistil longer than the stamens; and, in consequence of this position, the dust from the anthers which are at the ends of the stamens can fall upon the stigma or extremity of the pistil; which process is requisite for making the flower fertile. He gives as instances the flowers *campanula*, *leucoium*, *galanthus*, *fritillaria*. Other botanists have remarked that the position changes at different periods of the flower's progress. The pistil of the *Euphorbia* (which is a little globe or germen on a slender stalk) grows upright at first, and is taller than the stamens: at the period suited to its fecundation, the stalk bends under the weight of the ball at its extremity, so as to depress the germen below the stamens; after this it again becomes erect, the globe being now a fruit filled with fertile seeds.

The positions in all these cases depend upon the length and flexibility of the stalk which supports the flower, or in the case of the *Euphorbia*, the germen. It is clear that a very slight alteration in the force of gravity, or in the stiffness of the stalk, would entirely alter the position of the flower cup, and thus make the continuation of the species impossible. We have therefore here a little mechanical contrivance, which would have been frustrated if the proper intensity of gravity had not been assumed in the reckoning. An earth greater or smaller, denser or rarer than the one on which we live, would require a change in the structure and strength of the footstalks of all the little flowers that hang their heads under our hedges. There is something curious in thus considering the whole mass of the earth from pole to pole, and from circumference to centre, as employed in keeping a snowdrop in the position most suited to the promotion of its vegetable health.

It would be easy to mention many other parts of the economy of vegetable life, which depend for their use on their adaptation to the force of gravity. Such are the forces and conditions which determine