

to the insect for its valuable service to the flower? What happens to any particular flower which entertains no insect guest?

The dependence of flower upon insect and the co-relation of the individual and its environment will surely teach a lesson as applicable to human welfare as to vegetable.

This little plant has settled the question of aerial navigation for itself long before such questions agitated the Santos Dumonts of the modern world. Its tiny seed is fitted out with sails which bear it upon the winds of summer, upon a voyage of exploration and colonization. It settles down, making use of an anchor whose simplicity is only equalled by its adaptability to its purpose.

The question of economy of material has likewise been carried to perfection, quite up to modern ideas upon the subject. It has been found that in ocean vessels carrying large masts, less iron may be used if the masts are hollow. Greater strength is given for the same amount of material. This common every-day flower long ago raised its head of florets upon a stem built upon the most recently improved pattern.

What place does the Dandelion occupy among flowering plants? A comparative study will show that its flower cluster is a highly organized one. It stands almost at the head of flower clusters and would seem to be one of Nature's latest productions. This may be learned by observation and comparison of flower clusters. The simplest clusters are such as those of the *Pyrola* and the *Shepherd's-purse*. In these the flowers have stalks all of nearly the same length, and the earliest flowers to bloom are the lowest. If these stalks were lengthened so as to bring all the flowers to the same level, we would have the flat-topped cluster, such as that of the *Hawthorn*. In such a cluster the earliest flowers to bloom are the outermost. If in such a cluster we were further to shorten the common stem upon which the individual flowers are arranged, broadening the top so as to make room for them, and, at the same time, if we were to eliminate the little stalks of each flower so as to have it rest immediately on the top of the broadened stem, we would have a cluster like that of the dandelion. This is the most perfect kind of cluster. Considering this, therefore, and remembering also the very great departure of each floret from the structure of such a simple flower as the *Buttercup*, for instance, we are compelled to believe that the Dandelion occupies, not the most exalted, perhaps, but a very high place in the commonwealth of flowers.

These are some of the problems which challenge the attention of the student. Here he finds abundance of material for sensory training, and at the same time is confronted by questions the solution of which will require his best thought and reflection.