

are also carried by animals. These when wetted become sticky. The moisture causes a coat of mucilage to form all round them, so that they stick to any thing that touches them, and as they dry they become securely gummed to the object, and may then be carried for many days before becoming dislodged. An example of this class will be found in pepper-grass and shepherd's purse, as well as in several others of the cress family.

V. SEEDS THAT ARE SPREAD BY PROPULSION AND SEEDS THAT ARE SPREAD BY TRAILING AND CLIMBING PLANTS.

In this class are to be found some rather complicated methods of seed distribution. In the case of the violets, the pod bursts open when the seeds are ripe like a great many other seed pods, but in this case the seeds remain in the separate valves or partitions until they are expelled slowly by the drying and contracting of the sides of the valve, which forces the seeds out by squeezing so that in some cases they are thrown several feet away. Anyone who has collected pansy seeds should have noticed this.

An interesting example of a plant throwing its seeds, as if from a sling, is shown by the common cranesbill, though the method here employed is quite different from the last.

Another interesting plant is the jewel-weed, or touch-me-not (*Impatiens*). To thoroughly appreciate the methods employed by this plant in scattering its seeds, I would suggest the readers trying to collect some seeds. When, if a beginner, I am sure he or she will be surprised at the rapidity with which the seeds vanish at the slightest touch, just as if they knew one was after them.

The peas and beans are also examples of this class of plants, which by the rapid curling up of the sides of the pod when dry, part of the seeds are thrown some distance away. Many other examples of plants which have special ways of propelling their seeds will be found in any district if looked for.

The peas and beans also come under the class of plants that spread their seeds by trailing and climbing. Perhaps the best examples of these are members of the gourd family, melons, cucumbers, etc., the seeds of which under natural conditions, by being left where the fruit ripens, would be spread over an area of several feet. Convolvulus and other climbing plants will also drop their seeds in many cases some distance from the parent plant, but as these plants prefer some sort of brush to climb up,