astray when we consider each apple blossom as made up of a rosette of thirty-five leaves.

The development of this blossom into fruit we may perhaps consider in this way: while the ideal terminal bud does not grow, nor the branch along which these leaves of the flower are attached lengthen, still circulation continues and material for growth accumulates, and this material is stowed away mostly in the bases of the consolidated organs representing leaves. These bases become very vascular, and remain fresh through all the history of the apple.

In a few days after flowering the delicate petals break away at the point where their bases coalesced with the outer whorl the calyx, and have a permanent vear. The author cells shrivel and the filaments of the stamens slowly dry from the top to the point of their insertion. The stigma and upper part of the style darken and dry. Only the petals and empty author cells really fall away, but circulation ceases in all portions of organs that are to take no further part in the production of the fruit, and for this production everything now seems ready.

Unless the tree is wonderfully vigorous there is not enough nourishment for all the young apples set upon it. Those on the outer row will feel the lack of nutriment first; the limbs of the calyx will roll back, the incipient apple will wither and soon fall, and this fall may be accompanied or followed by the other four, leaving only the central one to mature. The growth perhaps now most noticeable is that seen near the limbs of the calyx, which before reflexed now straighten, then approach and then tenderly and permanently embrace the stamens and pistil. The young apple is irregular near the calyx and angular throughout. The projecting calyx is made prominent for weeks as the growth goes on, and while the stem retains its normal position as to insertion it has dropped its fruits, and now has a clean stalk.

The sap goes on, and into the swelling, green globe of the apple; the breadth after a little increases more rapidly than the length, and the projecting calyx and insertion of the stem apparently retreat into depressions formed by the rapidly growing