

animals. In most cases the seeds of such fruits are protected by a very firm covering and are not digestible. They are sown broadcast by wild animals under circumstances most favorable for germination. The birds, too, belong to the society of tree-planters.

White Oak.—We will next listen to some accounts of the wind as a sower of seeds.

Sassafras (Iona).—Some trees produce dry seeds or seed-pods, and usually drop only a portion in autumn. They hold on to some seeds with considerable tenacity. Among these are the buttonwood, basswood, ironwood, blue beech, box-elder, hop tree, tulip tree, the ashes, catalpa, locust, Judas tree, birches, alders, larches, pines, spruces. The fruit or the seed is thin, or provided with wings, which distribute them as they fall, or after they have fallen. In winter it needs but a slight packing of the snow to bear up the seeds. At such times, some of the seeds are torn from the trees by the wind, and may be seen sliding along like miniature ice boats, often half a mile or more from the nearest tree. The wind also aids in transporting the seeds of our elms, maples, willows and poplars.

White Oak.—Next listen to something more about seeds.

Red Bud (Cynthia).—A seed is a young plant and is packed ready for transportation. It has a tiny stem, some seed leaves and a terminal bud. The mother tree, before casting off her progeny into the world, did not fail to give it a little outfit in the form of starch for food stored up in or surrounding the thick seed leaves. As the young chicks while in the shell are nourished by the yolk of the egg, so the young oak or maple subsists on the starch stored up before ripening.

White Oak.—When do our trees make their growth and how do they get ready for the next year?

Box Elder (Nina).—Most of our trees put forth their new growth during a few weeks in spring or early summer. Do you wonder what they are doing during the rest of the warm weather? They are by no means idle. They may be perfecting flowers and seeds, but all of them are getting ready for the next winter and spring. Through the influence of light and heat, the green leaves are forming starch which is transported and stored in the pith, young wood and bark. The young leaves and stems are started and arranged, packed in cotton, covered by scales and in some cases the scales are protected by pitch or varnish.

White Oak.—Next in order will be a few words in regard to the tree as a community.

Buckeye (Douglass).—A tree is a composite being, a kind of community by itself. The leaves and limbs are all the time striving with each other to see which shall have the most room and the most sunshine. Each strives for all it can get. While some perish in the attempt, or meet with only very indifferent success, the strongest of the strongest buds survive. Each leaf helps to sustain the limb which carries it, and each limb furnishes some nourishment to the common trunk for the common welfare. The tax is always adjusted according to the ability of each to contribute. As the limbs of a tree are striving for the mastery, so each bush and tree in grove or forest is striving with others for the mastery. The weakest succumb to the strongest; some perish early, some lead a feeble existence for many years, while even the strongest are more or less injured. With plenty of room, the trunk will be short, the branches many and widespread; where crowded, the lower limbs perish for want of light. Dead limbs fall to the ground to protect and enrich it for nourishing the surviving limbs and the trunk. The scars heal over, more limbs perish as new ones creep upward, and thus we find tall, clean trunks in a dense forest.

White Oak.—To be successful, it is very important to know how to gather and care for seeds and nuts.

Yellow Wood (Robert).—Gather the seeds or nuts of trees when ripe and, if convenient, plant them where the trees are expected to remain. In this list we include especially the trees which have long tap roots, and do not easily transplant, such as the tulip tree, the hickories, the oaks, the walnuts, and chestnuts. The seeds of elms and maples are not easily kept over winter. Seeds of evergreens, the larch, and the locusts may be dried and kept as grain is kept. Many seeds and nuts may be mixed with an equal bulk of sand as it is dug from a knoll, and buried a few inches or a foot below the