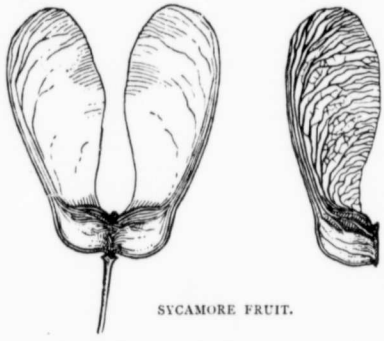
upon the nest, and feeds her through the entrance hole until her eggs are hatched. I have not seen this myself, and can only give the fact as stated by others.

Tree Seeds.

The high winds which usually prevail in early spring, perform a very useful office in scattering the seeds of trees and plants.

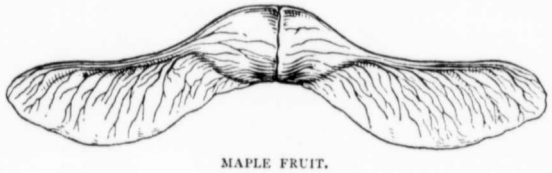
The hornbeams, sycamores and maples were unusually full of fruit last autumn, and their dried bracts and seeds are now lying thickly strewn over the lawn. Some of them are already sprouting and showing tiny cotyledon leaves.

The winged part of the sycamore fruit



SYCAMORE FRUIT.

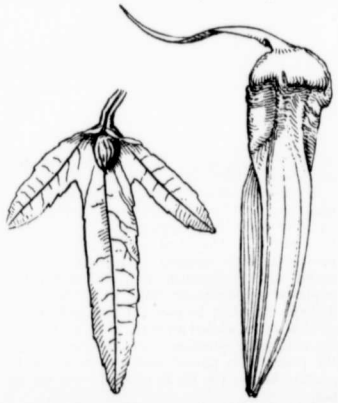
(botanically called *Samara*) has in many cases become a delicate piece of lace-work, the action of rain and wind having made it into a skeleton; the heavy end is entangled in the grass, and out of the seed-case a young rootlet is finding its way into the ground.



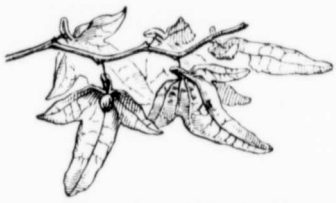
MAPLE FRUIT.

Later on I shall be able to find and record the unfolding cotyledon leaves, which are curiously rolled up within the seed-case.

The maple fruit is also two-seeded, and somewhat resembles the sycamore (which is



HORNBEAM. ARAUCARIA SEED.



HORNBEAM SAMARAS RIPE.

a maple), except that the two *Samaras* are joined at a different angle. The fruit quickly divides, and each seed has then a fair chance of germinating.

The hornbeam *Samara* is like a three-pointed leaf, the sharp-angled nutlet being attached to it at the lower end. Each bract in the cluster seems to prepare for its flight by breaking off from the stem, and then hanging by a hair-like thread, so that a passing breeze may easily detach it.

The araucaria, when well established and growing vigorously, will sometimes produce its huge cones in England.

There are male and female trees; the cones of the former will shed out more than a wineglassful of yellow pollen.

The strange-looking seeds which fall out of the fertile cones are sure to attract attention as they lie on the grass by their peculiar form and large size.

Poplar Catkins.

The flowers of various species of poplar are now appearing and form an interesting subject for study.

I have obtained to-day the catkins of the aspen (*Populus tremula*), the abele or white poplar (*P. alba*), the Lombardy poplar (*P. nigra*) and the grey poplar (*P. canescens*). A slight shower had brought out the perfume of the buds and blossoms of the balsam poplar or tacamahac (*P. balsamifera*), which has very conspicuous catkins of a bright reddish-brown.

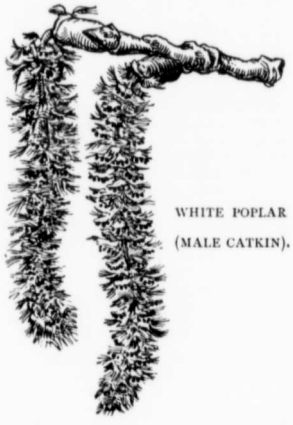
As most of these trees flower mainly on the upper branches where we cannot reach the catkins, we must be content to pick them up, as I did to-day, beneath the trees, where they look extremely like red and brown caterpillars.

Poplars are all dicœcious trees; that is, bearing flowers with stamens on one tree and flowers containing pistils on another, usually growing near by. This makes their study rather puzzling, and it is further complicated because the willows are now in flower and there is a certain resemblance between them; we may, however, always recognise poplars by their drooping catkins, whilst willow flowers are invariably borne upright upon their stems. The male catkins bearing the stamens are usually the most conspicuous, and often they appear earlier than the female flowers.

By dissecting a specimen poplar catkin from each tree, we can readily trace the different parts, the fringed scales bearing the stamens and the small woolly stigmas which catch the pollen-dust brought to them by the wind.

Poplar catkins are usually fertilised by the wind; they contain no honey, and are therefore unattractive to insects. The willows, having

WHITE POPLAR (FEMALE CATKIN).



WHITE POPLAR (MALE CATKIN).

small honey glands, offer three lures to the insect tribes—colour, scent, and honey—hence we may be sure to find bees and flies frequenting their early blossoms.

The Yew-Tree.

The male blossoms of the yew-tree are now fully out, and, as a passing breeze shakes the branches, they send out clouds of yellow pollen. I never see this happening without recalling Tennyson's interesting allusion to this "smoking" of the yew-tree.

> "O brother, I have seen this yew-tree smoke,
> Spring after spring, for half a hundred years."—*The Holy Grail.*

YEW BERRIES.