

Our largest and noblest maple, the one found in rich woods, has a *rounded* or curving sinus between its lobes (the only maple that has rounded sinuses), its edges are sinuate or curving, and its lobes, three, or sometimes five, prolonged into long, slender points. This is the rock or sugar maple.

The red maple has an *acute* sinus between its lobes. The lobes, three or five, are irregularly notched and serrate. This is our most common maple, growing either in clumps or singly, in swamps, wet woods, or on high ground.

The white maple has *apparently* rounded sinuses, but on closer observation they will be seen to end in somewhat blunt points, and extend more deeply into the leaf than in any other maple. The lobes are narrow, pointed, and toothed, and the under side of the leaf is silvery white. It is found usually on river banks, grows rapidly, and is a fine ornamental tree.

The remaining two maples are somewhat shrubby in character, growing in rich, moist woods. The striped maple, called also striped dogwood or moose-wood, from its light green bark, striped up and down with dark lines, has *three* slender, pointed lobes, the edges closely and doubly serrate, the only example in maples of such fine and close serration. The sinuses in this and the next species are broad and do not penetrate far into the leaf. The mountain maple has three, sometimes five, lobes, tapering to a point, but not so long as the preceding, with broad, coarse teeth, pointing outward, rather than upward, as in the last. Its leaves, also, have a tendency to grow in clusters, and are downy beneath. The leaves of the latter two are bright green and softer in texture than the first three. It will be interesting to trace the palmate veining of maple leaves, to see how the larger veins end in lobes, the smaller in teeth. Peculiarities will be noticed in the veining of each kind.

THE HEAVENS IN SEPTEMBER.

The shortening days of September bear witness to the sun's continued southward progress. On the morning of the 23rd he enters the sign of Libra, and, in the language of the almanacs, "Autumn begins." With the change of season it is as well to take our monthly glance at the stars at an earlier hour—9 p. m. in the middle of the month. Right overhead is Cygnus, with Aquila on the south along the Milky Way, and Sagittarius setting below. Lyra is west of the zenith, and Hercules, Corona, Bootes, and Ophiuchus fill up the western and north-western sky. The Little Dipper extends horizontally to the left of the pole, and the Great Dipper is just below it. Due south of Cygnus, and east

of Aquila, is the little lozenge of Delphinus, or "Job's Coffin." Capricornus and Aquarius are to the south and east, and low down on the south-eastern horizon the solitary first-magnitude star Fomalhaut marks the constellation of the Southern Fish. Aries and Pisces are low in the east, and the Pleiades have just risen. Higher up is the brilliant array of Pegasus, Andromeda, and Perseus, and far to the northward Capella is once more visible.

Among the planets Mercury is too near the sun during the month to be well seen with the naked eye. Venus is by far the most conspicuous ornament of the morning sky, rising before 2 a. m. all through the month. On the 16th she reaches her greatest eastern elongation. Though past her time of greatest brightness, she is still very brilliant and can be easily seen in the daytime when properly pointed out. At noon, on the 19th, she is about 3° due north of the waning crescent moon, and should be easy enough to find. Mars is a morning star in Gemini, rising about 1 a. m. in the middle of the month, but is not yet conspicuous. Jupiter is in Scorpio, and is being rapidly overtaken by the sun, so that he is only visible in the early evening. Saturn is in Sagittarius, and remains visible in the southwest about an hour and a half longer than Jupiter. Uranus is in Scorpio east of Jupiter, and Neptune in Taurus, very difficult to find without a telescope provided with circles.

September Investigations.

What colors predominate among the ripened fruits?

Compare the outward appearance and covering of the apple, pear, peach and plum.

In what manner are seeds protected that they may ripen?

What seeds are wind-sowed?

What seeds are distributed by the birds and insects?

How are the seeds of edible fruits dispersed?

What bright-colored fruits and seeds serve as food for birds?

Note the raspberry and blackberry bushes. Of what use are the prickles on the stems? Find other shrubs that protect their fruit from ants.

Notice the fruit of the rose; why does it not fall from the stalk when ripe?

Encourage the children to bring in a collection of different seed vessels or pods.

Find the fruits which are covered with burrs or husks for protection; the chestnut, horsechestnut, walnuts, butternuts, beechnuts and acorns.

Call the attention of the children to the winged seeds. Find the stray keys of the maple, the tulip, ash