



A GNARLED AND KNOTTED HICKORY.

leaf off. Other buds have large leaf-like scales, as the horse-chestnut. The bud scales are often lined with a soft wool, or the buds may be covered with a substance like varnish, to keep out dampness. Buds have many enemies, as want of nourishment, insects, severe and early frosts. When a tree makes what is known as a definite annual growth, on the new shoots buds form and ripen for the next season. Trees that make an indefinite annual growth, as all rounded and spreading top trees, depend on buds, and the trunk is broken up into branches, which in the same way divide and sub-divide into innumerable smaller branches.

### *The Oaks.*

There is a great variety of these the most valuable of our forest trees—over seventy species in all.

The oak is the embodiment of strength, dignity and grandeur. When enough room is given to let it follow its own bent it is most majestic. No other tree has such gnarled, twisted, crooked and knotted branches, or displays such irregularities and contortions. Its angularity of branching, its inflexibility of spray and its great size compared with its height, all proclaim its power to resist storms. Hence it is the monarch of trees, surpassing all others in dignity and nobleness. The foliage of the oak may readily be distinguished at all seasons. It comes out in the spring in neatly plaited folds; at first having a silvery lustre intershaded with purple, crimson, and lilac. When fully developed the leaves are deeply scalloped, of fine texture and glossy upon the upper surface. Oaks seldom grow as densely as pines, and