

WHITE PINES. Robert Douglas of Waukegan, Illinois, was the pioneer planter of white pines on the prairies of the Northwest and his precious memory is as green and perennial among tree-lovers everywhere as the needles of that conifer which, in groves of symmetrical white pines, make eolian music in praise of his great work, summer and winter, among the valleys, and on the hill tops of the Dakotas, Nebraska and Kansas. No single arboriculturist accomplished so much beneficence and lived to see so many people blessed by his labors.

There is no other timber-making conifer, of the value of white pine, which will grow as speedily and reach mature sawloghood in so brief a time on the prairies of southeastern Nebraska. Thirty-seven years ago at Arbor Lodge THE CONSERVATIVE planted an isolated white pine. It was an infant of two and a half feet in height and was taken out of a water bucket to be placed in the patch of ground over which it now proudly looks. But it had a slow growth. The annual upstretching of a white pine is recorded by itself. Every white pine at the end of the growing season crowns

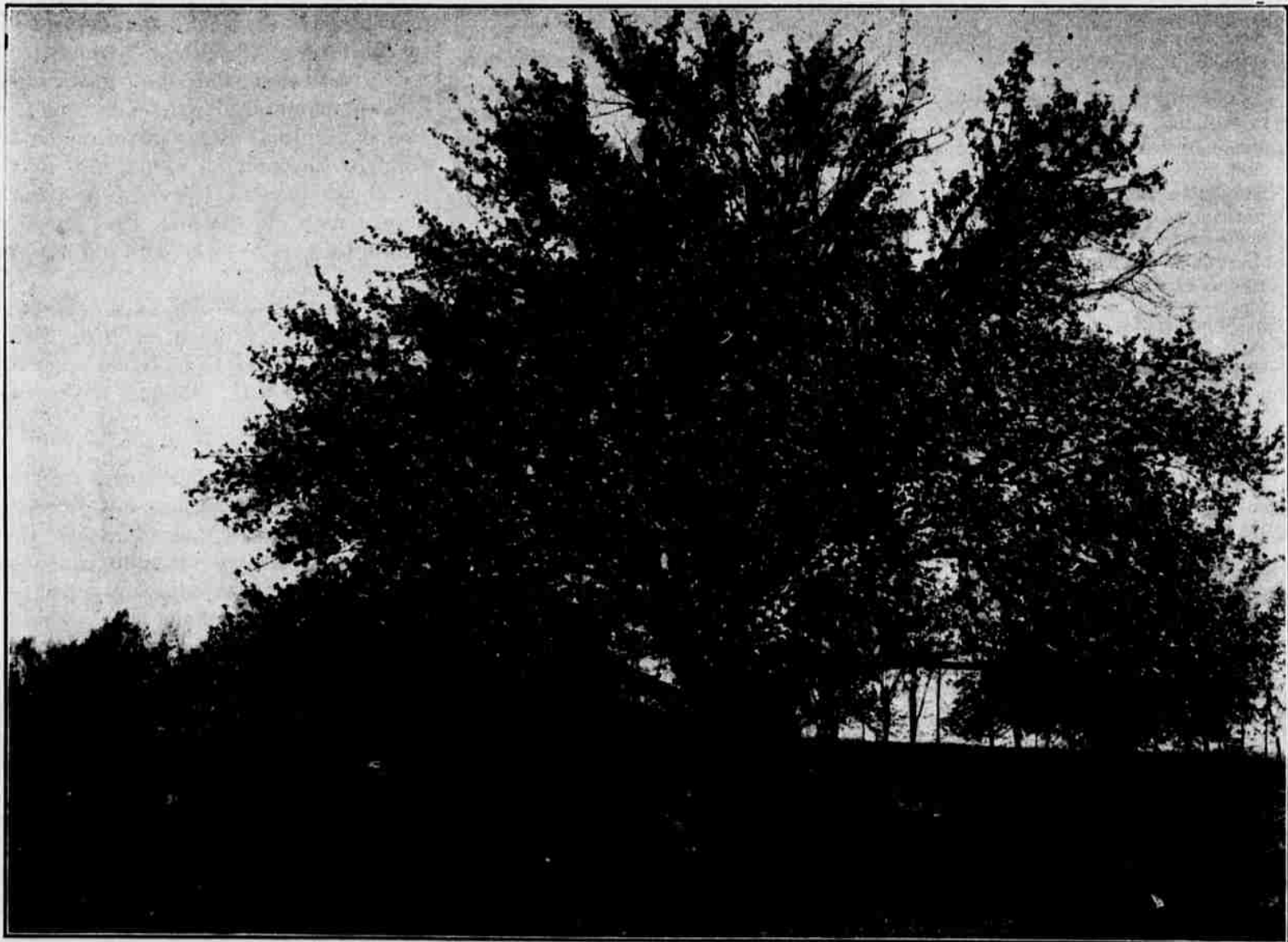
itself with a terminal bud. Around this terminal bud, at the sides of it, are other buds. When the growing season begins in spring the terminal bud makes an upward, perpendicular growth and becomes the trunk of the tree, while the buds about it make a lateral growth and become the limbs of the tree. Thus each year's growth is written, as in a diary, and the distance from one system of limbs to another marks the propitious and the unpropitious season with equal truth. But the growth of the isolated white pine at Arbor Lodge was not satisfactory; it was slow; it lacked energy and vigor. And now while the tree of thirty-seven years is, at five feet from the ground, nearly eighteen inches in diameter, it cannot compare with a tree of the same age grown in a forest or grove of density.

Every tree needs moisture for its roots. These roots convey water, holding in solution certain mineral salts, up into the trunk and limbs. Every tree needs light, but the two needs are distinctly different, as to different varieties of trees. In an isolated situation, standing alone, on an open plain the white

pine has to contend with constant heat and sunshine in summer, and with moisture-destroying winds, at intervals, all through the year. But the white pine in primitive forests shades its roots and shuts out the heat and light with dense foliage, retains the earth moisture in coolness about its base and spreads its mattress of cones, covering it with a blanket of yellow needles, all over the earth and thus conserves for its nutrition the rainfall beneath its wide-spreading boughs.

Trying to imitate Nature in June, 1890, THE CONSERVATIVE planted ten

A Mimic Forest. thousand white pines which were purchased of Robert Douglas & Sons. These pines were put in rows which were four feet apart and at a distance of four feet from each other in the row—precisely as corn is planted with a check-rower. The trees were about twelve inches in height. They were cultivated, both ways, for five years. In 1895 Master Wirt Morton, aged five years, son of Carl Morton, did some work among these pines. And his photograph was taken, beside a Roxbury Russet apple tree in full bloom, during



The man who teaches that all Americans, who have acquired a competence, are the enemies of all those Americans who have not, but are trying to acquire a competence, is a public enemy.