

have the burr oaks. The Austrian pine seemed somewhat stunted, although fair growth had been made in past years. This stunting was due, no doubt, to a disease which affected the leaves of the trees, causing many of them to wither and fall.

The white willow has attained a greater height than any of the other trees, having reached an altitude in thirteen years of 30 feet or more, and a diameter of trunk exceeding a foot at the base.

Shelter Belts.

Some excellent examples of shelter belts are to be found in the orchard, composed of Norway spruce trees, arranged in rows, so as to divide the orchard into five or six sections. No material advantage has been observed from the shelter afforded in the way of protecting trees from winter-killing, but protection from the prevailing winds has notably prevented the fruit from falling to the extent it otherwise would.

Conservatory.

Situated near the main building is a conservatory with three propagating houses, each 50 feet long, the middle one being fitted with extra pipes, so that a higher temperature can be maintained in it than in the others, and one of the outer ones is specially fitted up for propagating, by boxing in the water pipes so as to give additional bottom heat. In these buildings are propagated all the bedding plants needed for ornamenting the grounds. They contain also plants representing most of the different families required for the purpose of illustrating botanical lectures and class-work, as well as furnishing material and appliances for carrying on experimental work. Cut flowers are sold from these houses during the winter and surplus plants in summer, but the revenue from this source rarely exceeds \$300 per annum, and entails commercial work, which interferes, to some extent, with the legitimate and more important aims of the institution.

Botanic Work.

The Professor of Botany, Prof. T. J. Burrill, has done good work in his department. While efficiently carrying on the class-work devolving upon him he has also found time to thoroughly study many of the low forms of plant life, such as smuts, rusts, moulds, &c., many of which are parasitic on and frequently destructive to the higher forms of vegetation. The life history and habits of many of these have been carefully worked out, and suggestions made as to the best methods of lessening the injuries caused by them. It is chiefly to this earnest worker that the credit is due of having solved the mystery which has so long surrounded that dreaded disease known as the fire blight in the pear tree; and since it has been demonstrated beyond reasonable doubt that it is caused by the presence and propagation in immense numbers of a very low form of vegetable life, a species of micrococcus, the way is