

special manures. Similar tests have been carried on with wheat, oats and other grain; also with grasses, potatoes and other field crops.

Experimental Farm.

In the experimental farm there are 35 acres of orchard. Fifteen acres are devoted to forest plantations; 40 acres to ornamental trees, shrubs and plants, a considerable area to small fruits, of which there are a large assortment, and a portion to vegetables. There is also a nursery, where young trees are grown and students are taught the arts of budding, grafting, &c.

Orchard.

This was planted in 1869, and included at the outset 1,800 varieties of fruit trees gleaned from every quarter, with the view of testing their adaptability to the State of Illinois. As was anticipated, a large number of them were failures. Indeed, the climatic and other conditions of this section are not particularly favourable to fruit growing. The country is flat, and in many places wet, and difficult to drain, and the winters sometimes are severe. Many apples which are grown with profit in Ontario, such as Greenings, Baldwins, &c., do not succeed well here.

Pear culture has not been continuously successful. The trees did fairly well for ten or twelve years, but last winter the weather was so severe that a large proportion of them were killed, both standard and dwarf, although the latter suffered most.

Plums have been unsuccessful. Out of many varieties originally planted there are now but very few left. No peaches or apricots are grown.

Of cherries there are a large number, chiefly of the Morello type, including many of Wier's seedlings, which do remarkably well. The sweet cherries belonging to the Bigarreau class are almost always killed before coming into bearing. Quinces are but little grown.

Many sorts of grapes are raised, of which Worden stands highest in favour. Moore's Early and Ives' Seedling rank next. Delaware is a failure on black prairie soil, but does nicely on sandy ridges. Strawberries and raspberries are extensively grown, and with much success.

Forest Plantations.

The planting of forest clumps was begun in 1871, and at that time there were no trees in the district, except on the margins of streams. The example set by the agricultural department of the University has stimulated tree planting generally, both for ornament and shelter. The black walnut is a favourite tree, so also is the silver maple (*Acer dasycarpum*) and the box elder (*Negundo aceroides*.) A variety of cotton-