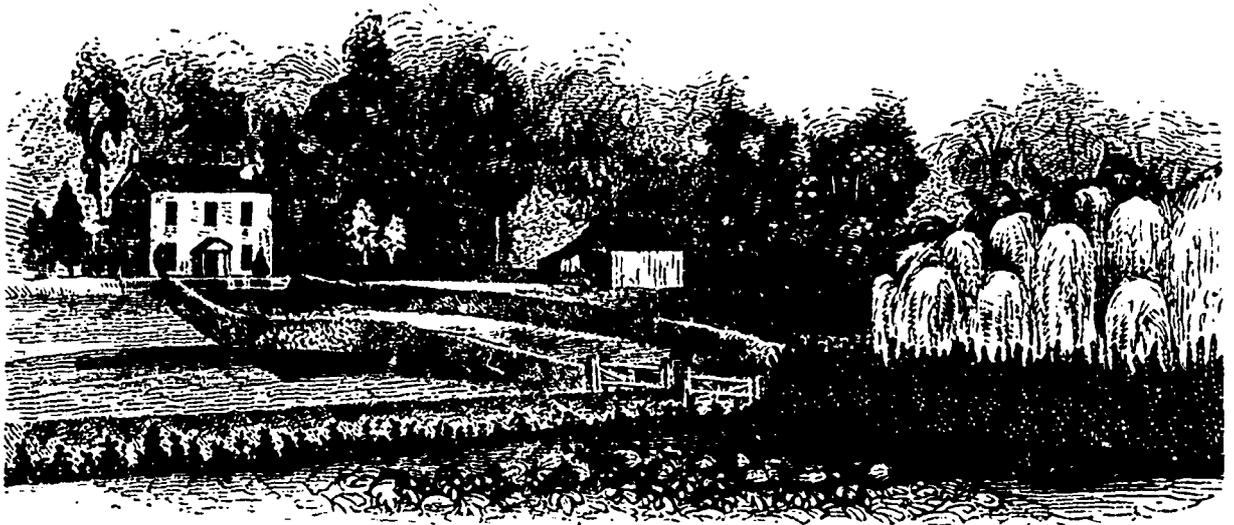


worth sixty-five million dollars every twelve months. Is it not pretty evident that we have yet to learn the true value of the food of agricultural plants? Public opinion hardly tolerates the study of vegetable and animal physiology in our common schools, even in rural districts. Hence, neither the production of crops, nor the growth of domesticated animals, nor the wonderful adaptation of each to the other, is duly considered. If manure is so valuable as we have shown, to increase the oil of olives, how much more important is it to augment the growth of apples, pears, peaches, and other fruit?

fifty yards will not answer. Strained tightly during the summer season, the cold of winter will operate with irresistible power to injure and destroy them.

There remains the use of hedge plants; and of all that have come under our notice, the Osage orange bids fair to surpass all others. Objections are made by some to hedges of any description, as occupying too much ground, thus rendering unavailable for use large portions of a farm. We question whether any properly made hedge would occupy any more ground than the common worm fence; and there would be much less growth of weeds and worthless shrubs in



VIEW OF SUGAR GROVE FARM.

### FENCES.

The subject of fences is one of great and increasing interest to farmers and landholders, and the annual expense of maintaining enclosures in good condition, to say nothing of the rapidly diminishing supply of fencing material from our forests, is a heavy percentage on the profits of cultivation. In a very few years our choice will be confined to two materials—iron in its various forms and arrangements, and hedge plants.

We see it stated in our eastern exchanges that a gentleman of Lowell, Massachusetts, has invented a machine for weaving wire into sections or panels, which, by reason of their peculiar construction, obviate one material objection to the use of iron for fences, viz, the liability to derangement from the effects of heat and cold. It can be furnished according to the purposes required, at from \$1.25 to \$1.75 per rod, and when once set will last, with proper care, for one's life-time. Unless very carefully constructed, and proper allowance made for expansion and contraction, fences made of iron wire strained between posts at intervals of from fifty to one hundred and

and around a hedge fence than is customary in the corners of fences. We believe the Osage orange will be found equally as hardy as the *Isabella* grape, and endure about the same degree of exposure. Its sharp thorns springing out at the base of each leaf-stalk, its comparative exemption from the depredations of insects, its rapid growth and endurance of close trimming and pruning, are weighty arguments in favor of its use.

A hedge on the farm of Mr. JAMES MCGREW, in Montgomery county, Ohio, has been set about four years, and is so compact and broad at the ground, that neither fowls nor pigs can pass it, and so high that the most unruly animal would not attempt to jump it. Professor TURNER, of Illinois, in an article on hedges, says :

“On this place of 150 acres, requiring, as I have stated, four miles of fence to put it in perfect order, I calculate that I am saving, in cash, at least \$200 per annum, *in all coming time*, by using hedges rather than rails, aside entirely from the additional comfort, security and beauty of the hedge.

As regards *comfort*, I can only say that I now write with my eye resting upon a hedge about four