

it would not be advantageous to plant it with maples for the production of fuel or sugar; black walnut for the purpose of timber or nuts; Catalpa or some fast growing tree for posts or railway ties; basswood or poplar for paper making; or in fact any tree that will grow on the peculiar soil to be planted, or that which is most suited for the adjacent market.

At the recent meeting of the Fruit and Forestry Association at Barrie, it was stated that maples planted from ten to fifteen years were of sufficient size to tap, that the three quarter inch auger and the iron spile now used would not injure the tree or retard its growth, that maple sugar and syrup were advancing in price, so that the saccharine products from a maple bush would pay good interest on the investment, as its products were becoming more scarce and expensive every year.

It may be stated in the outset it is useless setting trees for profit unless the land is so fenced that cattle can be kept out of the plantation. A two wire fence will accomplish this object, and it is recommended that Lombardy poplars, or some other variety of quick growing trees, be set from six to eight feet apart around the park lot, so that in a few years the wires required for protection may be attached to them; by this means a permanent inexpensive fence may be secured, and damage to the growing bush prevented. A farmer of considerable experience assured the writer that he has five acres of wood which supplied him with firing for some years past. I asked him if it was not diminishing; he said, on the contrary, it was rather on the increase, but he added, "we never let the cattle into it."

The farmer is a practical individual, and if it can be proved to him there is money in anything he will probably try and get it out. There is not much money in ornamental planting, or in shade trees, but even these have their value. A law should be enacted, or a clause inserted, in the cruelty to animals act, imposing a fine on any one keeping horses or cattle in a field not suitably provided with shade trees. It is almost as barbarous to keep cattle standing in the hot summer's sun all day, and does them nearly as much harm, as if they were kept without water. Again, farms planted along the roadside with avenues of handsome trees, are more eagerly sought after by intending purchasers, especially from the old world, than those which are barren of nature's noblest specimens of vegetation. I have before me a letter from a gentleman in India, who asks me where he can purchase a farm in Canada. Amongst the stipulations are: "We must have trees and water, after living in these fearful Indian plains."

Perhaps in years to come, cupidity will do for our country what a refined taste for the beautiful, which appears to be lacking to a large extent amongst the rural classes, has so far failed to do; and when it is found that more money can be gained by a judicious arrangement of forest and ornamental trees, such planting will take place, and tree shelters and road-side avenues will be the rule instead of the exception, as at present.

When you wish to reform a Tartar, it is said you must "catch him young." Perhaps this simple piece of advice might be usefully applied in the present instance by inaugurating

tree-planting in our public school yards. It is understood this plan has been attempted with a fair amount of success in some places in the United States. In order to carry out the scheme proposed, a piece of ground should be set apart in the school enclosure for the purpose of planting trees, and every boy should be induced to plant a seedling of some kind on his entrance into the school, or when he is of such an age as to be able to comprehend what he is doing; this tree he must take care of in his play hours, and on finally leaving the educational establishment he should be permitted to carry away with him his tree, whilst the boy who takes his seat would fill the gap thus made by planting another in its place. In this way an interest would be established and the seed for future operations sown.

Many of our school grounds are, unfortunately, too small for even this modest piece of arboriculture; at the same time, it must be borne in mind that a very small space will be required, if the seedling tree is pulled from the woods with the hand at six inches in height, and grows from seven to nine years (the boy entering school say at five and leaving at twelve to fourteen years old), at the end of which time the tree will be from ten to fifteen feet high, and an inch and a half to two inches thick at the base. The boy who has watched his tree growing and tended it for so many years will naturally become interested in it, and will have conceived some idea as to the time it takes to grow a tree from seed.

The actual lesson thus practically taught will never be effaced from the boy's memory, especially when he has the living example in the shape of his own sapling constantly before him; as no doubt when he has cared for his tree so long, on carrying it away with him he will plant it in some place secure from destruction by cattle or otherwise.

The Dairy.

Effect of Cold on Cows.

BY PROF. L. B. ARNOLD.

Dr. Nichols, of the Boston Journal of Chemistry, found that the cooling of his cows' legs by standing in a pool of cool water in hot days in the summer to avoid the annoyance of flies, diminished their flow of milk. His observations were carefully and repeatedly made, and there could be no mistaking the fact that the chilling of their feet and legs decreased their milk secretions, so sensitive are cows to the influence of cold. Such being the case, what must be the effect upon cows which, at this time of the year, have not only their feet and legs, but their whole bodies, not only moderately, but severely chilled, by standing out in the cold winds and storms needlessly all day, or have their legs, teats and ears and tails nearly frozen by standing still too long in a cold stable? The observations of the learned and close observing doctor are worth remembering by every dairyman in these high latitudes, as a warning against exposures to the inclemencies of the seasons. How many dairymen have any clear appreciation of just how much chilling a cow will bear before her milk will begin to shrink or her flesh begin to give way? Not many, it is pretty certain, or we

should not so often see cows on the leeward side of fences with their backs humped up and their heads and tails drawn down, and their feet all gathered upon a single square foot of surface, with the vain endeavor to ward off some of the intensity of the chilling blasts that distress them. If the owners of cows or other stock fully appreciated the extent of loss they endure by allowing their animals to get chilled to discomfort nearly every day all winter, they certainly would take better care of them. No man in his right mind would stand by idly and see the flesh of his animals gradually but steadily wasting, without making a strenuous effort to arrest the waste. He certainly would exert himself if he positively knew that either flesh or milk was being lost, and would cost four or five times as much to restore it again as it would cost for lumber to save it by making comfortable quarters. Everybody is not expected to make as close observations as Dr. Nichols, but it would seem as if anybody ought to be able to distinguish between the amount of flesh on a cow's bones in the fall and the quantity which is on them in the spring following a hard winter; and if he has fed his animal decently well, he ought to be able to understand that the difference in flesh between fall and winter is due to destruction by cold. The reader may think a man must be stupid if he could not "see it," but there are thousands of men in every State and Province, the flesh of whose cows comes and goes alternately every summer and winter, and yet the owners "don't see it." It would seem as if men who are so terribly stupid as not to know enough to take care of their own property when the loss is so plain, ought not to be invested with the right of suffrage to tamper by their votes with the property of those who have sense enough to take care of it, and that the man who could wake up the stock owners of a State, or even of a township, to a realizing sense of the losses they annually incur from needlessly exposing their stock to cold, or to cold which could be easily avoided, should be entitled to a pension the rest of his life. Such a man would certainly deserve well of his country.

Prof. L. B. Arnold says a dairy farm costs ten per cent. less to operate than grain growing or mixed agriculture; second, the mean returns average a little more than other branches; third, prices are nearer uniform and more reliable; fourth, dairying exhausts the soil less; fifth, it is more secure against changes in the season, since the dairyman does not suffer so much from the wet and frost and varying seasons, and he can, if prudent, provide against drought.

The bogus butter men in New York are coming to grief. The dairy commissioners have commenced a series of prosecutions against the vendors of the vile stuff, and are resolved not to relax until oleo. is gone. It is said that oleomargarine and butterine are sold to the retail dealers at 13 to 15 cents a pound, and retailed as butter at 20 to 25 cents. The retailers are attempting to evade the prosecutors by peddling direct to the customers without passing the goods through their shops.

The length of working hours for farm laborers is established by custom, not by law.