

with sharp, well defined lines, and they can be made of every variety of shade, from a pure white to a dark brown or stone color.

"These blocks, as now manufactured, are 10 inches long, 5 inches wide, and 4 inches thick, containing 200 cubic inches, and weighing about 12 pounds each; they have an air chamber running through the centre.

"The blocks, from the nature of the material used, and the severe pressure to which they are subjected in process of manufacture, are very durable in their character, as it is a well known and established fact that mortar composition, properly made, is the most enduring of all substances, withstanding exposure for centuries, and constantly growing harder by atmospheric changes, until it becomes a perfect stone.

"These blocks have been subjected to every conceivable test—have been immersed in water until they have absorbed all the moisture which they could hold, and in that condition they have been exposed to severe frosts, and then thawed, and the same process repeated again and again. After being subjected to all the alternations of the atmosphere, the result in all cases has proved the indestructibility of the block.

"They are composed of such materials, that, so long as the laws of chemistry hold good, time will but make them more durable."

A CHEAP ICE HOUSE.—A writer submits the following plan for a cheap Ice House:—

"For the benefit of those who wish to enjoy a little cool luxury during long, hot summer days, I send you the plan of a cheap Ice House in which I kept ice from February to October, using from it every day after warm weather commenced. Nailed up a pen, 11 by 12 feet, four feet on the ends, seven feet on the sides, leaving the gable ends open—the ground descended about one foot in twelve—filled in saw-dust about six or eight inches deep—sawed the ice as square as possible with a cross-cut saw, and packed it in, leaving a space of a foot on the sides all around. Pounded the cracks between the ice full of fine ice; filled the space around with saw-dust, stamping it down so as to make it close as possible; then covered the whole 12 or 15 inches deep with saw-dust, and put on the roof. After warm weather commenced, I generally went over it once a week to see if there was any melting; if there was, I pounded the place full of saw-dust. This house will hold from 2½ to 3½ cords. If it is allowed to freeze solid, more will be wasted than used. I have tried that plan, but if left as it is packed, you can roll out a block and saw off with a hand-saw as much as is wished."

Another.

A Farmer in Seneca Falls writes: "We have kept ice for two seasons past in our wagon-house, taking up the floor in one corner, and making what you might call a large bin, about nine feet square, extending from the ground up to near the chamber floor, but not quite, leaving room for a free circulation of air above the covering of the ice and the floor overhead.

There was slope enough to the bottom for thorough drainage, which is an important matter in my opinion, as well as the open space above. We placed in the bottom about a foot thick of saw-dust and turner's shavings, then some loose boards for the ice to rest upon, and piled it up in the centre, leaving a space all around of fifteen or sixteen inches between the ice and sides of the bin, until we had six two-horse loads in, when we filled in the sides with saw-dust and shavings from the planing mill, tramped it down solid, covered the ice well on top with same material, and had nothing more to do with it until we wanted to get it for use, which was a very easy matter, having of course left a door or opening from the wagon-house into the ice-room."—*Maryland Farmer.*

MILK CELLAR.—A milk cellar will be coolest when well sunk in the earth, and not much above its surface. Eight feet would be a good depth. The windows, near the top of the walls, should be protected from the sun, either by trees or shrubs, or with blinds or shades; and wire screens inside should be made to exclude all insects. Covering the bottom with hydraulic cement is not a good conductor of heat, it will render the cellar warmer in summer and cooler in winter, by preventing access to the earth. Good stone flagging would be better in this respect, and hard burned brick would be better than common brick. There should be a ventilating flue run up from the upper part of the apartment, in which the current of air may be regulated by means of a register.—*Country Gentleman.*

Horticulture.

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THE ORCHARD.

SHOULD ORCHARDS BE CULTIVATED.

Quite a discussion has lately arisen on the question whether it is better to cultivate, that is, plough and harrow the ground in our orchards, or to seed them down and let the ground lie undisturbed. As experiment alone can satisfactorily solve the problem, fruit growers have been requested to give the result of their experience, throwing light upon the subject. Responding to this request, a correspondent of a contemporary writes thus:—

"I have several orchards about fifteen or twenty years old, that have always been kept in sod, and received no other attention than a slight pruning every two or three years, and an occasional load of manure or ashes as a top-dressing. As a consequence, we never had a bushel of perfect fruit up to the year 1870. The trees bore pretty good crops, but the fruit was small, wormy at the core, and knotty, while the trees themselves looked very badly. The soil in all of them is a black gravelly loam; the trees consist principally of Bellefleur, Smokehouse, Green Pippins and Romanites. In the fall of 1870, I ploughed the ground in one orchard, containing about thirty trees, to a depth of five inches, gave it a good dressing of manure, and trimmed the trees carefully. Since that time I have kept the ground cultivated and the trees carefully trimmed and topped, and each year has noticed a marked improvement in both trees and fruit until this fall, when I had the satisfaction of sending to market the finest lot of Bellefleur and Smokehouse apples ever seen in this section, and which I readily sold at \$1.25 per bushel, while apples were selling all through our streets at from 30 to 70 cents. The fruit was large, rich flavored and high colored, while from the trees growing in sod I did not get ten bushels of first class apples. This I think proves very clearly the importance of cultivating the ground and scraping the trees regularly and carefully, as by so doing we can most effectually destroy the harbor of all the insects injurious to the apple, besides giving the trunk and limbs a healthy, smooth bark, under which the sap can flow freely in sufficient quantities to ripen perfect fruit."

Now the experiment in this case throws no light on the question at issue. The orchard had simply been neglected, had only an occasional load of ashes or manure and a slight pruning once in two or three years. Before the question can be fairly tested, the orchard should have all the manuring, scraping and pruning which it requires without ploughing or disturbing the soil. After having taken care of it in this way for a number of years and results noted, then the ground might be ploughed, harrowed and cultivated every year for a like length of time, and if any difference were noticed it might with some show of reasoning be attributable to the stirring of the soil. But that the products of an orchard which has been manured, pruned, scraped and cared for, should be better in quality and quantity than of one that was not systematically cared for, with or without stirring the soil, was a result most certainly to be expected.

Our advice is not to seed down an orchard of young, growing trees, but to stir the soil with the plough and cultivator, until the trees have attained nearly their full size, then the orchard may be seeded down and the growth allowed to remain and decay on the ground, not cut and carried away. At the same time, the trees should receive such supply of manures, ashes, &c., as will keep them in good healthy condition, with a regular annual washing of the bark with a solution of potash or weak ley, and pruning as may be needed. We believe that when the trees have become large and the roots have filled the ground, it is better not to use the plough in the orchard; but to keep up its vigor and productiveness by taking nothing away from the soil except the apples, and applying to the surface such fertilizers as may be needed. The trouble is that when the orchard has been seeded down, all care and attention cease, pruning is done by cuts, no fertilizers are applied, or if at all, without any regularity, and the whole thing is left to take care of itself. Better by far to plough up the orchard every year and take care of it, if you cannot take care of it without ploughing.

CLEARING MOSS FROM FRUIT TREES.

The American Agriculturist says nothing is better than carbolic soap and lye. Make common lye of wood ashes, not strong, and add half a pound of carbolic soap to a three-gallon pail of boiling lye. Apply hot with a swab to old trees. It has been used with entire success on apple, pear, peach and cherry trees, destroying every particle of moss it touches.

SHELTER BELTS FOR ORCHARDS.

Mr. F. R. Elliott, of Ohio, writing to the *Cleveland Herald* says that the benefit derived from the planting of Evergreen trees for shelter is due to the fact that a well grown evergreen gives off continual warmth and moisture, the influence of which extends only to a distance from the tree equal to its height. Hence he argues that belts of evergreens on the north and west of large orchards of fifty or more acres fail of their object, and that to assist in preventing injury from extreme cold in winter, and from the frosting of the germ bud of the fruit in spring, all orchards should have evergreen trees planted in and among them at distances of not more than one hundred and fifty feet apart.

While we think that much of the benefit of good belts of evergreens is due to the fact that they break the force of strong, frost-laden winds, and therefore do not believe that they will eventually prove to be of no value, but on the contrary that they will be of great value when once they have attained sufficient height and strength to arrest the sweep of the wind; yet we do believe that Mr. Elliott is calling attention to an ameliorating effect which these trees produce upon the surrounding atmosphere, the full benefit of which can be secured only by planting them, as he suggests, at intervals through the orchard. How he has ascertained that this influence extends only to the distance of a circle around the evergreen, the radius of which is equal to the height of the tree, he has not told us. An account of the experiments by which he has been led to these conclusions would be exceedingly interesting and instructive.

TO MAKE PEAR TREES FRUIT.

Many persons complain that Pear-trees are so slow in coming into bearing, and indeed this experience has found expression in the proverb "Plant pears for your heirs." This is not true of all varieties, however, as everyone knows who has cultivated the Bartlett pear, for example. Mr. D. W. Coit says that refractory sorts, such as the Dix and Urbaniste, can be brought into bearing early by securing, at first, a good healthy growth of well ripened wood, by means of thorough cultivation, and then after the tree has attained to a suitable size, any branch may be thrown into bearing by cutting it back during the early part of summer. This will make the eyes that are left form rosettes, throwing out four or five leaves. Sometimes these become blossom buds and fruit the next season, but at the farthest are certain to blossom the third year.

Our friends who are anxious to see the fruit of their pear-trees can try this method, which Mr. Coit commends, especially to those gentlemen who are raising seedling pears and wish to know the result of their labors as speedily as possible.

THE BALDWIN APPLE.

This variety has been reported to be too tender to endure the climate of our colder latitudes, yet the following paragraph from the *Maine Farmer* seems to indicate that the tree is both hardy and profitable in some parts of that cold state: "I raise many kinds of grafted apples, perhaps nearly all the most noted kinds raised in Maine, and among all the winter varieties the Baldwin stands at the head, with me. The tree is hardy and prolific; the apple fair and handsome, and of the right size; fine grained and solid, the heaviest apple that I have ever known according to its bulk; the quality good for either eating or cooking, and when you carry them to market, no buyer objects to No. 1 Baldwins. I can get more dollars from a Baldwin tree than from any other kind."

The facts are these: The Baldwin is a first-class apple, it is raised in Maine in great abundance, and no other variety, as yet, takes the precedence. There are thousands upon thousands of nice Baldwin trees in this State, which I venture to say, are as hardy or nearly so as any other variety. And there are thousands of barrels of this deservedly popular fruit shipped from this State in years when apples are plenty. So, too, the demand for Maine Baldwins is on the increase, each succeeding year bringing some new customer to our doors.

REGISTERING AND LABELING

The *Country Gentleman*, very timely suggests that cheap, durable labels for fruit trees can be made of strips of tin, half an inch or more in width at one end and tapering nearly to a point at the other. The name is scratched on the broader end by means of an