Horticulture.

EDITOR—D. W. BEADLE, Corresponding Member of the Royal Horticultural Society, England

Planting Evergreens.

In travelling through our happy and prosperous country, and observing the many new substantial and frequently elegant and commodious rural mansions, one cannot fail to observe the great scarcity of evergreens in the grounds surrounding these places. Here, for instance, stands one of those well built mansions, upon a lovely site, commanding a beautiful view of the surrounding country, but there is not a solitary evergreen tree to shelter it from the northern blast of our winterly winds. Oh! what a shudder passes over us as we approach the door of such a place on a cold winter's day. And there is no use denying that the surroundings of many of our country houses are to a great extent the index to what is within. Let us contrast such a dwelling house, with a well built, but smaller and much less expensive one. Here every room is intended to be used at least once or twice through the year, both by the family and their friends. How unlike the larger mansion, whose inmates have never thought of really occupying more than the kitchen and the rooms above and behind it. As we approach the less pretentious dwelling, on that same cold winter's day, we stand on the lee side of a noble evergreen for a few moments previous to entering the door, and instead of shuddering with the cold from without and the anticipated cold within, as in the former case, we begin to feel warmer, and if in a meditative mood, fold our arms and listen to the sweet music of nature as she chants her Æolian strains in the branches of the pine. And when within the house, and looking out of the windows upon what would otherwise appear all dead and dreary, what could be more refreshing to the eye and to the mind than those lovely evergreens. Here almost in front of the window, and near to it, stands a noble Austrian Pine, (the finest of all evergreens for this climate) with its lower branches resting upon the ground, and the whole pyramidal body a dense mass of long, never fading, but at all seasons, refreshing evergreen foliage. A fine wind-break, and beautiful to look at all winter. And in the summer, the mocking bird and the thrush never fail to build their nests in its branches. A short distance from this stands a small clump of Norway Spruce, and on the other side of the house a clump of our native Black and White Spruce and Silver Fir. All these trees are beautiful, both in winter and summer, but especially in winter, with their branches gracefully drooping with festoons of pure white snow. As the above named trees will bid defiance to cold when the thermometer stands thirty-five degrees below zero, I think they may be called hardy. Of course the size of the grounds should determine the number of trees to plant; but, however small, there should be at least one evergreen; and if I had only one evergreen, that one should be an Austrian Pine, perhaps the Norway Spruce comes next. There is no kind of ornamentation to our houses so effectual, nor half so cheap as the planting of trees, and nothing so cheerful to the eye in winter, or has a stronger tendency to cheat winter of its dreariness, than evergreens near to our dwellings.

Paris, Jan. 27th, 1874. Charles Arnold.

Profitable Crab Apple Raising.—R C Field, of Trempealeau Co, Wis, informs us that for several years past he has raised from 300 to 1,000 bushels of Transcendent, Hyslop, and other improved crabs, and has never sold them at less than $2 00 a bushel—selling at Eau Clare, or any other market in that region. This year his crop will be small, owing to the blight on the trees. Mr Field is extending his orchards, expecting to have some thirty acres, mostly crabs, and Russian apples, setting some 300 Tetofski, for instance.—*Western Farmer.*

Fire Blight.

The following is from the report of the committee of the National Pomological Society, appointed to investigate the question of fire blight on pear, and apple trees.

Every observation tends to the conclusion that fire blight is caused by zymotic fungus, whose presence is not detected until life is destroyed in the affected parts. This form offers a wide field for the investigations of microscopists, and from their future labors we hope to arrive one day at the origin of this fungoid growth. We are unable to arrive at a satisfactory conclusion, as to what peculiarities of soil and temperature induce the favorable conditions for the development of this fungoid vegetation.

In the experimental gardens of the Department of Agriculture at Washington, the following mixture is prepared. Place a half bushel of lime, and six pounds of sulphur in a close vessel, pour over it about six gallons of boiling water, adding enough cold water to keep it in a semi-fluid state until cold. It is used as a wash, and applied to the tree and branches as high as can be reached. It should be applied two or three times during the summer. Since this preparation was used, no trees thus treated have been lost, although small limbs not coated with the mixture were attacked and destroyed. Carbolic acid has also been used without any perceptible difference in the result from the lime and sulphur mixture. Boiled linseed oil, applied to the trunk and limbs, has been tried near Norfolk, Va., with marvellous cures, as reported. We meet on this instance of the use of an extraordinary ingredient resulting in good effects, as contrary to what is usually the result when using this application upon the body of trees, its effects being to seriously injure the tree, if it does not destroy it.

Still another form of blight is doubtless caused by mechanical action, by the rupture of tissues consequent on a sudden superabundant flow of sap. This attacks only our most thrifty growing trees, either in early spring, when the vegetation first becomes active, or after a period of drouth, and partial stagnation of vegetation, when abundant rains suddenly force out a luxuriant growth; moderately vigorous trees are never attacked. It is often noticed in very vigorous trees that the bark of the trunk is split longitudinally; whenever this is apparent, such trees are always free from this form of blight, as the pressure upon the vacular tissues has been relieved. From a series of experiments commenced in 1857, it is demonstrated that trees whose bark has been longitudinally incised, and directed, never showed any signs of this form of blight.

Peculiar methods of culture undoubtedly influence the cause of blight, but upon this there exists a wide range of opinion. Clean culture, and repeated stirring of the soil while it may in many instances be conducive to most beneficial results, will often cause the total destruction of a pear orchard. In seasons of zymotic fungoid, or fire blight, highly cultivated trees fall early victims to the scourge, while those cultivated in grass, with an annual top-dressing of manure, usually escape the contagion. The third form of blight caused by mechanical action, is seldom found in orchards where the soil is left undisturbed, but is so common in gardens, or where the trees are thoroughly worked, that it has become a question of time for the entire destruction of one's orchard.—*Farmers' Union.*

The Most Profitable Apples.

At the winter meeting of the New York Horticultural Society the opinion of fruit-growers was sought for on this very important subject.

Mr Babcock, Lockport, considered Baldwin, Rhode Island Greening, and Roxbury Russet most profitable of all varieties. The Twenty Ounce and some summer varieties may pay well in certain localities—but for winter nothing equal to three first named. Dr. Beadle, Ontario, said a friend thinks the Golden Russet more profitable year after year than the Roxbury.

Mr Hoag, Lockport, said that the Mann apple was profitable in Niagara county. Resembles the Rhode Island Greening, very fine, and as long a keeper as Rox-Russet.

Mr. Lyon said that they thought much of the Northern Spy in Michigan. As it originated in Western New York would like to hear how it does here.

Babcock—Does well on some soils, when well cultivated, but is late coming into bearing.

Mr. Lyon, in answer to inquiry, thought highly of Wagener as an amateur fruit; some value it for market. Does well for a few years, when overbearing affects the tree and they cease to be profitable.

Dr. Beadle spoke of Duchess of Oldenburgh as a hardy, productive tree, and fine showy fruit, well adapted to high latitudes, but should be planted with caution for market, as it ripens in September.

Hardy Apples.—A Minnesota correspondent of the Rochester *Post*, says that the following kinds of apples are as hardy as a burr oak, and can be classed as double-proof "iron clads." Duchess, Haas, Saxton, Tetofsky, Wallbridge, Peach, Sweet Baldwin, and Porter.

Keeping Apples in Plaster.—I have been experimenting the past few year with apples, and find those packed in plaster keep much longer than any other way I have tried. I use flour barrels, and find them preferable to apple barrels, as they are made tighter. I first cover the bottom of the barrel with plaster, then a layer of apples, then cover with plaster, and so on till the barrel is full; then put the head in and drive the hoops tight. The plaster being of a cold nature, keeps the fruit at an even temperature, and being fine and dry, packs so close as to keep the apples air-tight. I had Northern Spy and Swaar almost as fresh in May as when picked, and found no decayed ones, and think they would have kept till early apples were ripe, had we not used them. Shall put up several barrels for next spring and summer use, as I am satisfied that our best varieties, such as Steel's Red Winter, Wagener and Seek-no-further, will keep several months longer than putting them up without plaster, and will retain their flavor much better besides.—*Cor. Rural New Yorker.*

THE FRUIT GARDEN:

Peculiarities in Grape Culture.

There are several varieties of grapes which are acknowledged by all who have their individual points and qualities of excellence, but which are very often subject to defects and faults; and we think that a few remarks relative to our experience with these may perhaps prove useful to some of our readers.—The subject cannot be regarded as unimportant, seeing how very popular a fruit the grape has become, and how many, comparatively inexperienced, are now attempting its cultivation.

Gros Guillaume.

In some instances, this showy and excellent grape is rather a shy fruiter, especially when pruned on the spur system; and sometimes it does not color well, and the berries swell unequally. We have found it develop these peculiarities on its own roots. To obviate such defects, some have recommended that it should be grown in poor, sandy borders. We have found that grafting it on the Muscat of Alexandria causes it to fruit as freely as a Black Hamburgh when spur-pruned, every berry swells equally, and invariably it has colored to the deepest purple. We consider the bunches more compact on the Muscat than on its own roots; the berries always larger and perfectly regular. Grafted on Black Hamburgh, it did splendidly for a couple of years; but each year degenerated in every respect till we cut it out. When calling at Chiswick Gardens, last July, we were informed that there, on Hamburgh roots, it manifested the very same tendency. We consider that on Muscat roots, in Muscat heat, Gros Guillaume is one of our grandest grapes. In 1872 we cut six bunches from a graft put on a Muscat in 1870. The largest of the six weighed nine lbs., and the least 5¼ lbs. The style of bunch was far superior to those on a vine on its own roots in the same house, and the quality was better.

Muscat Hamburgh (Black Muscat).

We have never met with this variety well set on its own roots but at one place, viz. Eccles, in Dumfriesshire, grown in a red sandstone loam. Here every berry stones like a Hamburg, and there has been produced a bunch 7 lbs. weight; but the defect is that they never color beyond a brownish-black. Grafted on the Black Hamburgh it sets perfectly, and colors as well as can be desired if not grown in too high a temperature. Like some other black grapes, I have observed that in Muscat heat it does not color well. The warm end of the Hamburgh-house is the place for it. Few grapes can surpass this one either for appearance, flavor, or long-keeping qualities. We have had it 5 lbs. weight on Black Hamburgh roots; Mr. Fowler, of Castle Kennedy, has shown it heavier—and its size is its least valuable quality.