

Garden, Orchard and Forest.

Making Wine from Native Grapes.

The following receipt for making domestic wine from Catawba or Isabella grapes, used by G. A. Nicolls, at Reading, Penn., is commended by a gentleman who has tried it successfully:—

1. Select perfectly ripe bunches, and then carefully pick off the stems and remove all grapes which are not quite ripe.
2. Squeeze the juice out, either by hand or press; strain through a hair sieve, and pour it at once in a clean, sweet barrel or keg, adding to the vessel two gallons of water for every gallon of juice made.
3. At the same time put in four pounds of sifted sugar per gallon of juice.
4. In adding the two gallons of water stated in section 2, let it strain through the pulp, skins, &c., of the residuum of the grapes after being squeezed.
5. Fill the vessel full, up to the bung-hole, which cover with a sand-bag, to allow the fermentation to escape.
6. Watch the barrel daily, and clear or scrape away the scum, which will be thrown out in large quantities.
7. As the wine falls below the bung, fill up daily (after clearing away the scum) with sugar water, made with two pounds of sugar to the gallon of water.
8. The fermentation will continue from three to six weeks, according to the weather. When it has ceased, I poured into the bung-hole about one gill of brandy to the gallon of juice, to flow over the surface and prevent its souring; but the brandy may not be indispensable. Then bung the vessel up tight.
9. During the cold weather in, say, the following February, when the wine is perfectly still and clear, draw it off into any other clean vessel, then quickly clean, scald and rinse thoroughly the barrel in which the wine was made, and return the wine to it, bung it up, and draw it off as required for use.
10. If you wish to make a very palatable champagne, have the champagne bottles ready when you rack off the wine, as stated in section 9; put a tablespoonful of common syrup in each quart bottle; then fill with the wine, leaving about one and a half inches clear below the bottom of the cork, which fasten very securely with strong twine, as the pressure of the fixed air to escape is very great.
11. The wine will improve by age, after the operation described in section 9.
12. An old brandy or whiskey barrel is the best (see section 2.) Never use a new barrel, as the wine will taste of the wood.
13. About fifteen pounds of grapes will give one gallon of juice. The riper the grapes the better the yield of the juice. One gallon of grapes in bunch weighs about four and a half pounds.
14. Keep the wine in the cellar, where it will not be exposed to extremes of temperature.
15. An approximate estimate of the quantities required for a thirty gallon barrel will be as follows:—

TO MAKE THIRTY GALLONS OF WINE.

One hundred and fifty pounds grapes, yielding 10 gallons juice; 20 gallons water, strained through the pulp residuum (see section 4), 40 pounds of sifted sugar, 2½ pints of common brandy. (See section 8.)

If carefully made, the wine will be wholesome and palatable, with a flavor like grape-juice. Madeira. It was preferred to all others at the Washington hospitals during the war of 1861-5, and was reported to have been the means of saving the lives of some of the soldiers.

About Apple Growing.

Calvin Disher, Esq., of Belfast, Me., is an enthusiast in apple growing. His farm of fifty acres, with the exception of about ten acres in pasture, is covered with apple trees of various sizes and ages, though a majority of them are now in bearing. One of his theories is not to use animal manure around or near his trees, but to depend wholly on vegetable manure in the form of mulching. He defends his position upon the ground that the one is the natural method and the other artificial, the latter tending to decay and the former to health.

He kept over 1,200 bushels of apples, mostly Baldwins, through the past winter and spring in his cellar, and has only just sold the last of them, the prices ranging from \$1 to \$2 per bushel. He says by his mode apples may be kept the year round, without losing their juiciness or crispness; and this method should be understood by every orchardist.

His theory is that early rotting and decay of apples is due to a great extent to a vegetable miasma in the air, which is communicated to it by vegetable evaporation under certain conditions. The effect of miasma is first seen in a minute speck; sometimes as many as a dozen may be counted on the same apple.

His remedy is a daily airing of the cellar or place where the apples are stored, arranging so as to have a brisk circulation until all the stagnant air is expelled and its place occupied by pure, healthy air.

His success has certainly demonstrated the feasibility of his plan. He is one of the most successful growers in this section, and his views are worthy of consideration.—*Country Gentleman*.

Layering Shrubs.

It is often to us a subject of surprise to find so few persons, especially those residing in the country a distance from nurseries, who attempt to increase their stock of shrubbery by layering the branches. Almost every variety of shrub can be thus multiplied. Even among those who do this, it is not often that the queen of flowers—the rose—is thus treated. It is usually propagated by sticking cuttings from the new wood in August and nursing carefully through the winter. By layering the growing branches, however, it is by the succeeding season a bloomer; and this, too, can be done easily, that is, without the use of a sash or hot-bed, usually resorted to with the cutting. In laying down, take a sharp knife and slit the part of the branch that enters the ground from one joint to another; then cover with two inches of soil, and fasten down with a forked stick. Not only roses, almost every kind of shrub can be thus propagated. And the person who does not know how to do this should go without them all the days of his life.—*Ec.*

Valuable Birds.

The value of our native birds to the farmers and the good they do in destroying injurious insects are well illustrated by a recent statement in *Forest and Stream*, from which we learn that the birds common in the Western States, the western lark, mountain plover, burrowing owl, chestnut-collared bunting, western ground robin, field plover, blue-bird, yellow-billed cuckoo, red-eyed vireo, scarlet tanager, Baltimore oriole, orchard oriole, night hawk, eared grebe, Hudsonian godwit, rail, Wilson's tern, Esquimaux curlew, consume insects only; the lark bunting, yellow-headed blackbird, crow, blackbird, white-crowned sparrow, cardinal and Wilson's phalarope consume both insects and seeds; the pinnated grouse eats insects and green plants; the yellow-shafted flicker lives on insects and ants' eggs; indigo birds live on seeds and the tanager on buds; the sparrowhawk also devour many insects. These facts have been learned by examination of the contents of the crops of these birds.—*New York Tribune*.

Culture of the Chestnut.

The planting of timber on our Western prairies should be the first thought of the settler; but what variety of trees and how to start them are questions requiring some consideration. Willow and other soft woods, although of very rapid growth, should never take precedence of more useful species, as the chestnut and locust. The latter grows rapidly enough, is invaluable for fencing material, and in addition the chestnut pays well in the sale of its nuts.

The American species should be set out in groves for timber; the rows eight feet apart each way, with corn planted between. Young seedlings will thus receive a protecting shade, as well as cultivation, until they are of sufficient age to do without either. They should never be trimmed, as the lower branches afford ample protection to the bodies, and in after years nature will perform this duty in due form and in proper manner. If in the way of the cultivator an occasional limb may be shortened in, but never cut close to the body. Trees grow much better and are always healthier when the lower limbs are allowed to shelter the main trunk all the way to the ground.

My success in grafting has been varied. The first attempt was undertaken in the belief that the scions must be kept dormant until the stocks had grown and were developing their young buds. In consequence, I was obliged to wrap the scions and lay them in contact with ice until the proper time arrived to use them. Subsequent experience, however, convinces me that I was in error, and that I can be more successful by performing the operation just previous to the moving of the sap. My present practice is to cut the scions very early in the spring, and keep them fresh and cool (by covering them with soil, on the north side of a building where the sun never shines) until needed. Latterly I have cut them about the middle of March, and grafted about the 1st of April; difference of latitude must, of course, influence other cultivators in the West.

Chestnuts are not so readily grafted as apples and pears; they are variable, and we can never feel assured that success will be a certain fact; taking one year with another, 50 per cent. will be a fair average. As an illustration, a few years since I inserted about 40 grafts in the head of a large tree, and but 5 failed. One week later I placed 25 grafts on another tree, and but 5 out of the number grew. Still one week later than the last, I inserted 25 grafts in another tree, and but 3 survived. Budding is still less satisfactory, and I have now relinquished it altogether.

Where one has a particular variety of uncommon size and quality, grafting must be resorted to, else in a few generations it will return to its normal condition—that of a small and comparatively worthless fruit; still I firmly believe that in the far West, where no inferior varieties are grown, chestnuts may be raised pure from seed, year after year. The nuts may be planted at once in hills similar to corn, or they may be transplanted from nursery rows at one or two years of age. The French variety, so called, will produce better than the Spanish, and the trees are more compact in habit, resembling in the latter respect a round-headed apple tree. These foreign varieties are, however, inferior in quality to our native species, when eaten in a raw state; but after roasting or boiling, there is no apparent distinction excepting in size.

Planting chestnuts in orchard, say 30 feet distant each way, has many recommendations. The ground can be cropped several years, and the grass and weeds kept free from the bodies, thus proving a sure protection against mice, which commit sad havoc on the bark. An orchard of this character would come into bearing so early and produce so abundantly that remuneration would prove a sure fact.—*T. B. D., Penn.*

Soap Wash for Fruit Trees.

The beneficial influence of a weak alkali wash upon the bark of fruit trees is of long-standing acknowledgment. Its action is in expansion of the pores, while at the same time it is destructive of all animal life, sporadic or otherwise. Writers or theorists differ as to the best time to apply it, but we have always found that if good common sense be used in preparing it, the time of application is always good. Now for the preparation:—If you use purchased potash, reduce it so that you can bear your finger in it half a minute or more without a tingling or sore sensation. If you can obtain a good soft soap from the refuse grease and lye of ashes saved up dry, then take it and reduce it (the soap) down, not to a suds, but so that it will not beropy when used by a whitewash brush. Use it freely; it matters not materially just when, but say now, and any time most convenient until July 1st, but after that time it is perhaps better to wait till the next year.—*American Farm Journal*.

Lime and Apples.

A Mr. Millar refers to the effects of lime on his orchard, and says:—

I have found nothing better than lime in producing good apples; we have lime and gravel soil. Newton Pippins planted in 1853; in twelve or fifteen years the apples got scabbed, and I threw lime under some trees, and the apples growing on those trees are to-day as fine as any apples I have ever seen. I scatter a bushel of lime under a tree in the spring; some other varieties do not require so much. The apples are as good as twenty years ago when I used lime. My trees have deteriorated and I used lime, and they are as good to-day as ever. I always keep plenty of hogs in my orchard; they pick up the insects. Barn yard manure tends to introduce insects and make them breed more rapidly, and hence should not be used.

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