

the family are at lunch or dinner the air of the room can be entirely changed. It is well to open the window both at the top and bottom, for the bad air rises. This supply of pure air is quite as essential for human life as for plant life. Impure air kills more of our children than any other disease—in truth it breeds it, is the chief cause of diphtheria, fevers, &c., &c., to the end of the sad catalogue of aches and ills. So let the windows stand open, daily, fair friends, and increase the vigour and health of your family, as well as of your flowers. There is an art in watering plants to which few amateur florists attain. Unless they are really thirsty they do not require water; and to keep the roots in a soak is not healthy. A large hair pin will stir up the soil, and you can easily determine whether water is needed. Give it liberally, but do not let it stand in the saucers, excepting for the Calla Lily and Lobelias; they require moisture to thrive on; and if the former is set in a large pan of water, and it is kept filled, it will flower profusely all winter. This really beautiful lily is of the easiest culture, and our Southern sisters could make it grow rapidly in a little fountain or vase of water. It is by nature a water bulb. Plants which are in full bud and flower require more water than those not in such vigorous growth. Never apply one drop of water which is not warm to the hand—cold water chills the life out of many a fair flower.

The rain in summer is always warm to the hand; so must the water be which is given in winter. All plants kept in windows should receive a bath at least once a fortnight during the whole season. A bathing tub or a "tin hat," answers our purpose well. Set in the pots and shower through a fine watering pot. Scrub off the pots, wash out the saucers, and have a thorough cleaning, and set them in the kitchen to drain. If Bridget or Dinah is mistress there, this may be a source of trouble, but if not, why it is done easily. If a newspaper is thrown over a stand of plants whenever the carpet is swept, it is a great help to the plants; but minute dust will settle upon them, and a good washing is its only remedy. Newspapers play an important part in our window gardens. When the cold, frosty nights come, we use them to protect the branches from the chilling night air, and insert several thicknesses of them between the pots and the sashes."

#### THE PROFITS OF GRAPE CULTURE.

We find in *Hearth and Home* an account of the cost of growing and selling the grapes from 2 73-100 acres of vineyard, which we transcribe for the benefit of those who are interested in grape culture. The cultivator puts down the cost of cultivation from the time of gathering the grapes the previous autumn to the commencement of picking this year at \$223 51. This includes cultivating, hoeing and pruning, and 800 pounds of ammoniated superphosphate of lime applied to parts of the vineyard. The cost of picking, packing, and marketing, including freight and commissions and wear and tear of crates, he gives at \$227 88, making total cost for the year, \$461 39. His crop of grapes was 14 500 lbs., for which he received \$635 37 profits. In this he does not make any charge for rent of land nor taxes, nor for taking the grapes from the vineyard to the railway station. His vineyard contained 2,000 vines in bearing and 250 younger vines. They are mostly Concord, a few, about one-tenth, Delawares, and

some Hartford Prolific, Diana, &c. His first Delawares sold at 20c. per pound, his first Concord at 10c., his Delaware's falling to 10c., and his Concord to 6c., before the close of the season. He had about 12,000 pounds of Concord and 1,200 pounds of Delawares, the remainder being divided by some eight or nine other sorts. By this it would seem that it cost him about 3 1-5 cents to grow and market a pound of grapes; that the average gross receipts were about 7 1/2 cents per pound; and the net proceeds about 4 1-3 cents per pound, or \$232 per acre.

These grapes were marketed in the city of New York. We wish some of our readers who marketed their grapes here would give us the results. We are frequently asked if grape-growing will pay, and only those who have had experience can satisfactorily answer the inquiry.—*Globe*.

#### NEW SYSTEM OF ROSE CULTURE.

Some French and English horticulturists have been experimenting for three or four years on a new system of rose culture, which may be briefly stated thus: "First, prune out all the old wood; second, shorten the new wood a very little, peg the new wood down flat to the earth." The rose is thus allowed to bloom as the raspberry bears—only on the new wood, and that slightly pruned.

As unlike the common way as this is, the effect is said to be very fine. The young shoots pegged to the ground produce a greater abundance of bloom, although, perhaps, diminished in size. When a rose stalk stands upright, the stronger upward tendency of the sap has the effect to multiply the roses near the top; while, when trained upon the earth, the sap works more evenly throughout the length of the stalk. This is shown both in the bloom and in the multitudinous upward shooting of stems from the main stalk. The effect of this new mode of training, would no doubt be very fine in covering sloping banks and mounds, and also in the more rapid production of small roses for bouquets, &c. Its novelty will, no doubt commend it to all amateurs who have time and inclination to experiment.

No plant requires closer pruning than the rose and the finest blooms are always found upon the stalks which shoot from the root, showing the importance of a severe cutting away of the old wood. The bush should always be trimmed so as to open its branches as much as possible, for it likes the sun. The more sunlight the rose receives, the more rapid the growth and the more numerous and beautiful its flowers.—*Journal of the Farm*.

#### KEEPING PLANTS IN THE CELLAR.

A lady correspondent, from Elizabeth, N. J., writes to the *Cottage Gardener* as follows, about protecting tender plants during the winter:

"It may interest some of your lady readers to know how those who cannot afford the luxury of a greenhouse can keep their tender plants all winter. My cellar is dry, cool and dark. About the first of November, I have the orange, lemon, petersporum, and oleanders, carried into the cellar. These are all in large tubs, except the latter, which I have placed in one when taken in, and then the roots covered, up with soil. These plants are watered once a week