

single-flowered varieties are gaining rapidly in popularity as they become better known. They are easily cultivated, increase rapidly, and a stock once procured can be kept from year to year as long as desired. By starting the roots early in pots in the house they can be brought into flower before the middle of summer, if that is desired. But it is a great point in their favor that they bloom late, when many kinds of flowers have passed away. The tall growing, the dwarf and the handsome single varieties make a great stock to select from, and one has ample opportunity in them to indulge his fancy.—*Vick's Magazine*.

PLANT NOTES.—No article of a liquid nature possesses more manural properties than soap-suds, and on this account it should never be thrown away. It contains the food of plants in a state of solution, and therefore, is prepared to act at once and with energy. By mixing it with soap suds, chip manure, muck, etc., and allowing the whole to ferment, an excellent manure for field or garden crops will be obtained. In a liquid state it is a valuable manure for grape vines and all kinds of fruit trees, as well as for vegetables and flowers.

Several kinds of fertilizers can be used with practically the same results. Ammonia in water is good, inducing a healthy growth. Hen-manure dissolved in water is excellent. Let the water be about the color of weak tea. Use twice a week, which is probably as often as plants will need watering at this season. For those who prefer to buy "plant food," a preparation of guano, bone-meal and other fertilizing elements, is recommended. A handful of it, dissolved in a pail of water, is about the proper proportion. It will be necessary to keep stirring the water, as you use it, for some of the ingredients are heavy and will otherwise settle, and some of the plants watered last may get too strong a dose.

It is astonishing that while adornment is so easily provided people will so frequently permit old dead trees and frowning walls to stand year after year in all their dismal bleakness. If there is a dead tree in the door yard it is better to cut it down and dig up the stump, if it cannot for any reason be covered with verdure. But it can be and with little trouble. Suppose we have such a tree. It may be trimmed of all the limbs that are not safe to be left and they may be covered with ivy. It is often necessary to remove all the limbs. In that case stretch wires from the top of the trunk to other trees or buildings and let the ivy creep upon them. The effect is very pretty.

HOW TO MAKE HOME ATTRACTIVE.—

"Sweet is the smile of home! the mutual look,
When hearts are of each other sure;
Sweet all the joys that crowd the household nook,
The haunt of all affections pure."

Home is not the mere dwelling place of our parents, but is a divine institution—the highest, grandest, mightiest institution on earth.

Love is an essential element of home. Home-love is instinctive, and begets all those silken chords, those sweet harmonies, those tender sympathies and endearments which give the family its magic power. But home demands not only such love, but tender, strong, and sacred ties. They are the fibres of the home life, and cannot be wrenched without causing the heart to bleed at every pore. From them proceed mutual devotions and confiding faith.

The mother is the angel spirit of home; she is the personal centre of the interests, the hope and the happiness of the family. Her love glows in her sympathies and reigns in all her thoughts and deeds. It never cools, never tires, never dreads, never sleeps, but ever glows and burns with increasing ardor, and with sweet and holy incense upon the altar of home devotion.

Our nature demands home. The heart, when bereaved and disappointed, naturally turns for refuge to home life and sympathy. No spot is so attractive to the weary one; it is the heart's moral oasis; there is a mother's watchful love, and a father's sustaining influence; there is a husband's protection, and a wife's tender sympathies; there is the circle of loving brothers and sisters—happy in each other's love. Oh, what is life without these? A desolation! A painful, gloomy pilgrimage through "desert heaths and barren sands!"

CHLORIDE of lime is an infallible preventive for rats, as they flee from its odor as from a pestilence. It should be thrown down their holes, and spread about wherever they are likely to come, and should be renewed once a fortnight.

ORNAMENTING THE HOME GROUNDS.—Shrubs are valued for their bloom as well as for form and foliage. Each variety will serve some special end. As a rule plant in irregular groups, as directed for trees. At projecting points in shrub masses, plant some hardy herbaceous perennials. Use vines for porches or for covering a half dead tree-top or rubbish pile. Plant flowers mostly at the side of the house in irregular but gracefully-shaped beds, and about the trunks of trees when they are young, perhaps. No special paths are needed about flower or shrub groups. Rock work is seldom satisfactory, and is only appropriate in a retired portion of the grounds. A pile of shells, rocks and scorix in the front yard is sadly out of place. Heap them in some back and shady corner, and you will find great delight in transplanting from the woods and meadows an assortment of hepaticas, spring beauties, bloodroot, trilliums, bell-worts, phloxes and ferns. If you have a pond near by, introduce some water lilies, cat-tail flags, pickerel weed, arrow-head, and near by set some weeping willows and birches and ashes. Do not despise flower, shrub or tree because it is native or "common." As a rule the best known is better than the imported variety. Give thought and attention to all the details of mak-

ing a pleasant home. It is a worthy work. You will be surprised to find how much beauty can be attained at little cost, and how rapidly everything hastens forward to the completed plan in your own mind. You will have a constant comfort and a fresh hope realized every year as the trees grow, and transformation follows transformation toward the fulfillment of your original design.—PROF. W. J. BEAL, Michigan Agricultural College.

Editor's Scrap-Book.

HISTORY OF THE WEALTHY APPLE.—Suel Foster, in the *Country Gentleman*, gives the following history of what he considers one of the best orchard fruits in all the northwest: About 1865 or 1866 Mr. Gideon, of Excelsior, Minn., sent to Mr. Emerson, of Bangor, Me., for some crab apple seed, for he had tried the common apples and they winter-killed. He received nearly two quarts of seed. He planted the seed, and in five years this one bore a few specimens of apples. At seven years Mr. Gideon was so well pleased with the tree and its fruit, its quantity and its quality, that he took off 400 scions and brought to me, asking me to graft them on the halves, and to send him one-half the trees at one or two years old. I confess that I very reluctantly consented to pay a high price for an unknown seedling. But it was Mr. Gideon's knowledge and faith in the great value of the Wealthy, and his flattering me by saying that he heard that I was an honest man, that induced me to accept his terms. I sent him 1,000 one-year trees the next fall, which was, I think, 1875. A few scions had been sent out by Mr. Gideon the winter before (1874). Such is the origin of the Wealthy, which is no doubt a hybrid of crabs and common apples. Mr. Gideon is quite sure of this, for from the seed of the Wealthy he has obtained crab apples. I have a seedling of the Wealthy bearing this year, which resembles a very large crab apple.

ORIGIN OF THE CONCORD GRAPE.—Mr. E. W. Bull tells the history of the origin of the Concord grape as follows: "You ask me how I got the Concord? At the foot of a wooded hill with a south aspect, a wooded soil and shelter from all winds coming from the north-of-east and of west, the hill coming down to the road at Hawthorne's 'Wayside' on the west and to the same road about 1,500 feet east of the 'Wayside,' forming an amphitheater of which the road formed the chord. All the conditions favorable to the grape being present. I expected to grow grapes to perfection without difficulty, but this hope was doomed to disappointment; the late and early frosts incident to the valley of the Concord made it impossible to ripen any grape then in cultivation. The thought

occurred to me that it might be possible to improve the native grape by reproduction by seed, and I looked about me for the best grape which met the necessary conditions of hardiness, vigorous growth, size of berry and bunch, early ripening, and, with these conditions, as good flavor as the wild grape affords. At the foot of the hill before mentioned, a woodland path leading to the river, debouched into the open space, and there I found an accidental seedling, which in 1843 bore its first crop. It was very full of fruit, handsome and sweet, and the whole crop—dead ripe—had fallen to the ground before August went out. Here was my opportunity. I planted these grapes at once and got many vines, most of them harsh and wild, but one of them bore a single bunch, which I found ripe on the 10th of September, 1849, six years from the sowing of the seed. This was the Concord. When I found that I had attained such a gratifying success at a leap, so to speak, I resolved to continue my efforts in the hope of establishing the vineyard in Massachusetts, which had been found impossible up to that time. In this I have succeeded, and in establishing a strain of seedlings giving new grapes to the country almost yearly. The marvelous success of the Concord, its adaptability to all soils and climates where grapes can be grown, its patient enduring neglect, its wonderful fertility in ordinary soils, and its habit of giving to the country seedlings of value, justify and explain the general acceptance and foreshadow the time when we shall have of our own stock, grapes equal to those of Europe."

GROWING APPLES.—In an address before the Western New York Horticultural Society, Mr. Woodward stated that 100 barrels of apples removed from the land about as much phosphoric acid as 100 bushels of wheat, and about as much of potash as fifty bushels of wheat. The majority of all orchards are forced to produce a grain crop besides the fruit; and continuous cropping through perhaps fifty years has removed the two elements named and exhausted the soil. Wet straw has generally been the only restitution made; a poor reward for the exhausted crops. No wonder that orchards are not productive, and their fruit of no better quality.

KEEPING CABBAGES.—A correspondent of the *American Cultivator* describes his method of keeping cabbages as follows: "Cabbages for storage should not be pulled too early, November 1 to 10 being the proper time in this latitude, leaving them out as long as possible without having them frozen in the ground.

Pull them on a dry afternoon, and leave their heads down, throwing four rows together so that a cart can go between the windrows and pick them up. Do not handle them when the leaves are frozen. To store them they are simply packed in the furrow of a small plow, after