



What Farmers Want to Know

By W. F. MASSEY

Garden Notes

LATE September is the best time to sow seed of the Wakefield cabbage for early heading. Sow the seed where the bed can be watered, for stunted plants are not good and are more apt to run to seed in the spring. Get good strong plants for setting in late October or November. After trying various ways for wintering them, I have found that the best way is to run out furrows three feet apart east and west. Fill these well with manure and put some acid phosphate on the manure and bed well on these. Then open a furrow along the top of the bed, and set the plants in this open furrow and deep enough to cover the entire stem, the tender part, for if the stems get bursted by frost in winter the plants will be of no value. The Copenhagen Market cabbage is a very good one and somewhat larger than the Charleston Wakefield. But do not sow this variety in the fall, for it will be certain to run to seed in the spring. It can be sowed in January in a cold frame under glass or cloth and will come in nicely to succeed the early Wakefield.

My second sowing of spinach was made the middle of September. The last of the month or early October I will sow again for plants to winter over for spring cutting. This sowing I make broadcast and rake the seed in, as I find the plants winter better when sowed broadcast. In the lower South this sowing can be cut all through the winter. Some of our truckers sow again in February, but I find that the late fall sowing lasts about as well in the spring as the February sowing.

Seed of cauliflowers can now be sowed and set in a bed or frame 15 inches apart, and protected with cloth in very cold weather, making the soil very rich in the frame, and they will head in April or early May. As they start off in the early spring give them dressings of nitrate of soda and they will make larger heads. They are rather more tender than cabbage, but the cover will only be needed on nights when hard freezing is expected. I set them under glass sashes, six plants to a 3x6 sash, and fill in between with Tennis Ball lettuce. The lettuce is cut out before the cauliflowers need all the room, and in March the sashes are removed to another frame to protect and harden the tomato plants, as the cauliflowers will no longer need them.

The Norfolk Curled kale can also be sowed in rows for late winter and early spring cutting for greens, and the Seven-top turnip can still be sowed for the same purpose.

In the flower garden, take up the gladiolus and cut off the tops and separate the new corms from the old ones on which they grow. Save the little bulbets that form under the large ones and sow them now in rows like seed, covering rather deeply, and they will grow in spring and make new bulbs for another season. Kept dry till spring, many of them will not grow.

Tulips, hyacinths and narcissus bulbs can now be planted at any time up to Christmas, but the earlier the better, except for the Polyanthus narcissus, called Paper Whites, and the White Roman hyacinths. These should not be planted till the soil is finally cold, for if planted early they will grow at once and get injured by frost. Planted late, they will remain dormant and bloom in late February and March. They are reputed tender,

but have gotten this reputation because of early planting. I have grown the Paper White narcissus when the soil froze down below the bulbs and they were not killed.

One of the prettiest spring-blooming plants is the scarlet anemone. The tubers can be bought very cheaply, and they are the most unpromising-looking things one can plant, for they look like old dried up quids of tobacco. But they will grow all right, and they make a host of scarlet flowers in spring that will keep well when cut and put in vases of water.

Most people plant only the early tulips, but you will find that the late blooming Darwin tulips with stems nearly two feet tall will make a far greater show in a bed than the early ones.

Among the best of the narcissus or daffodils you will find the Emperor and Empress and the Glory of Leiden. These make very large trumpet flow-

ers, and the Glory of Leiden is the finest of all.

Most of them are made with a single layer of glass, while others have two layers of glass with a dead air space between to better ward off frost. These of course are heavier and more expensive than the single glazed sashes, but they do away with the need of mats or shutters in very cold weather.

Market growers generally use long lines of frames permanently placed. I use a number of portable frames with three sashes each. These are made 14 inches high at the back or north side and 10 inches in front or south side. The corners are made with angle iron and fastened with screws so that the frame can be taken apart and stored in summer. Cross bars are placed between the sashes. These are an inch thick and three inches wide and have a half-inch parting strip nailed to the middle of the bar. The ends are dovetailed to the sides but not nailed, so that they can be taken out in preparing the bed. They make a slide for the sashes in airing the bed.

A hot bed is a bed under a frame heated either with manure or fire heat. A small hot bed will start enough plants for a large number of sashes on cold frames. Hence the hot bed is not made large except in large operations by market growers. Where there is no danger of water

Hot Beds and Cold Frames

PLEASE give a detailed description of the construction of hot beds and cold frames, giving dimensions and distance from glass, and whether they should be on the surface or sunk."

The glass sashes used on hot beds and cold frames are generally three feet wide and six feet long. They are best made of clear cypress lumber.

HOW GERMANY DID IT—A LESSON FOR THE SOUTH

IN GERMANY we have an example of a nation that has for half a century been preparing its people not only for success in peace but for success in war. That Germany has organized the largest and most efficient army the world has ever seen is not the only reason why for three years she has been able to stand off the combined attack of the rest of Europe, and stand it off, not on her own soil, but on soil conquered from her enemies. Her well worked out system of rural credits that has made her small farmers independent land-owners producing more per acre than any other farmers in the world; her splendid system of schools that not only educate the children but train them for life; her careful system of medical inspection and correction through these schools—all have contributed quite as much as the army itself to her national efficiency. In Germany the child is a national asset. He cannot be allowed to grow up handicapped by disease or deformity because his nation needs him as a worker in peace and a defender in war.

Bismarck said, "Give me control of the schools and I will make of the nation what you want." They gave him control of the schools and he did it. The order came from the ruling class of Germany. Here you and I and the rest of the folks at home are the ruling class, and I am going to ask you what do you want this Nation to be? It is for you to decide, and when you do decide there are men who can carry out your plans quite as effectively here as Bismarck carried them out in Germany. There is a man sitting there [pointing to State Superintendent of Education] who can remake this State in ten years if you will tell him what you want him to do and pay the bills.—From an address by President Roger A. Derby at North Carolina Farmers' State Convention.

ers, and the Glory of Leiden is the finest of all.

If you have fine varieties of the large flowering cannas you can save the seed and sow them now, and they will grow well in spring and you may get some fine new varieties. Seed kept till spring are very slow to germinate, and have to be filed and soaked for several days.

To save seed of the China asters, let the flowers get dry on the plants and then you can rub out the seed and blow out the chaff and will have as good seed as you can buy.

Silver Maple Trees

TWO or three years ago I planted some silver leaf maple trees in my yard, and every fall or late summer the leaves are eaten by worms and the bark seems diseased near the ground. If this tree is so subject to disease and insects that it will demand spraying every year, I would prefer to dig out and plant better trees. What do you advise?"

The silver maple is a rapid-growing tree, but is unsatisfactory for several reasons: It is peculiarly liable to attacks of the cottony maple louse and other insects, and the wood is so brittle that the limbs of the

seeping in, the hot bed is made by excavating a pit wider and longer by several inches than the frame that is to be placed on it. Fresh horse manure is used generally. This should be piled near the frame till it heats and then turned over and mixed to heat again so as to start a uniform heat. The manure is then packed into the excavation and tramped down evenly and the frame placed on it and banked all around with manure. Fine fertile soil is placed inside the frame four inches deep, and a thermometer placed in it and the sashes put on. Then watch the heat as it rises, for the first heat will be too high for sowing seed. When the heat declines to about 85 degrees you can sow the seed. A hot bed for starting early tomato plants, for instance, should be made generally about the first of February, or as a general rule ten weeks before it is safe to set the plants in the open ground. Then the tomato grower has a large lot of sashes ready on cold frames, according to the number of plants grown. The hot bed with three sashes will start about 3,000 plants, and to transplant and harden these off he will need 12 sashes on cold frames. The plants are set about four inches apart each way in the frames in March and given air at all possible occasions to get them tough enough to transplant, which is shown by the stems of the plants getting dark purplish instead of green.

Cold frames are simply frames with heavily manured soil in them, and they are used for growing lettuce in winter and early spring, and starting other half hardy plants for transplanting, such as succession cabbage, onion plants, beets and radishes.

I use the double-glazed sashes and bank the frames with earth on the outside, and then it would take a temperature below zero to get frost inside. When the frames are set they should face south and be sheltered from high, cold winds. I have a tall evergreen hedge on the north of my frames. I find it an advantage to use a number of portable small frames rather than permanent frames, for I can make a succession of the same crops by moving the frame and avoiding planting the same soil over again, and can get the use of my frames when some more hardy crop like beets can dispense with them in March and I can use them for the tomato plants, which I start in a greenhouse as more convenient to work in than to stoop over a hot bed.

Under my double-glazed sashes, after cutting a crop of lettuce at Christmas, I sow seed of beets and radishes in January in rows six inches apart, and soon get the radishes out and leave the beets in twelve-inch rows. Then, as I have said, in March the beets can do without the frame and it is removed to harden the tomato plants for setting out in April. Then the beets are ready to pull by the time other people are sowing the seed.

Every garden should be supplied with frames and sashes and the winter garden made as interesting and profitable as the one in summer, for in a frame you can plant bulbs of the hyacinths, narcissus and others and get flowers in winter.

In the management of a hot bed the greatest of care must be used in giving air, for if you leave the sashes close in sunny weather you will burn up the plants. Watch the thermometer closely and give air both to hot and cold frames at every opportunity in sunny weather. If snow comes on the cold frames let it alone, for the snow is apt to be followed by severe cold and the snow will help keep out cold from the frames. But remove it as the weather gets warm and sunny.

FOR GENERAL UTILITY

Salesman—Yes, sir, we have some very nice suits. What color would you like?
Buyer—Well, I look after my own car. So I guess I'll get something as near grease color as possible.—Judge.