

FLOWER GARDEN AND LAWN.

Frames and Pits should be in readiness to receive all hardy plants.

Seeds.—Sow seeds of shrubs and perennials in boxes, which may be set in cold frames.

Paeonies.—The best time to set these is in the fall, when they are in a state of rest; divide and reset in good garden soil.

Bedding Plants.—Make cuttings of all to be saved over winter, as it is seldom worth the trouble to keep old plants, when new ones can be made so readily.

Cannas should be taken up before the leaves are killed by frost and stored in a shed where they can dry for a week or so; finally store them where frost and dampness cannot injure them; a good place is under the benches in a greenhouse.

The present is a better time for laying out new walks, drives and doing any such jobs, than the spring, when work is driving. After the plan is thoroughly made and all needed materials at hand, it will be comparatively easy to carry out the details.

Clematis may be raised from seeds which should be sown at once; if they fail to start next spring, they will be quite sure to grow the following one. Many very handsome varieties can be raised from seeds of good named sorts. Some native species are worth trying.

Bulbs.—This is the best month for putting in Hyacinths' Tulips and other spring flowering bulbs. Cover with coarse litter before severe weather sets in. Store tender bulbs, such as Tuberoies, Gladiolus, etc., in a dry place, where the mice will not injure them, carefully labelling the named sorts.

Dahlias.—Keep tied to stakes, and if covered cold nights with a cloth or even a paper, their bloom will often be prolonged for some weeks. After the tops are killed by frosts, leave the tubers in the ground for a few days, to ripen; dig on a sunny day, label, and take to the cellar, handling carefully, as they break readily.

Hardy Herbaceous Perennials.—The fall is the best time to divide and re-set most of these, as many start so early in the spring that they cannot then be moved with safety. Hardy herbaceous perennials should, as a general thing, be moved and divided once in three years, to keep them at their best. When left longer, the roots get matted and the soil around them exhausted.

Walks need thorough work, and to have the foundations well laid at the start; at least two feet of earth should be dug out and the space filled with stones to within six inches of the surface; then put on broken stone, and finally finish with good gravel; a walk or drive thus made will last, with the addition of a little gravel occasionally, for a life time. Always make the centre sufficiently higher than the sides, to allow the water to run off quickly.

CURIOUS PRAYER.

A gentleman in America has projected a work to be published under the title of *The Book of Uncommon Prayer*. Any one conversant with books of anecdote, will readily bethink him of much suitable material for such a volume. Perhaps no more appropriate example than the following from an old copy of *Fog's Journal*, has ever appeared: 'O Lord, thou knowest that I have nine houses in the city of London, and likewise that I have lately purchased an estate in fee-simple in the county of Essex. Lord, I beseech Thee to preserve the two counties of Essex and Middlesex from fires and earthquakes; and as I have a mortgage in Hertfordshire, I beg Thee likewise to have an eye of compassion on that county. And, Lord, for the rest of the counties, Thou mayest deal with them as Thou art pleased. O Lord, enable the Bank to answer all their bills, and make all my debtors good men. Give a prosperous voyage and return to the *Mermaid* sloop, which I have insured; and Lord, Thou hast said, 'That the days of the wicked are short,' and I trust Thou wilt not forget Thy promises, having purchased an estate in reversion of Sir J. P., a profligate young man. Lord, keep our funds from sinking; and if it be Thy will, let there be no *sinking* fund. Keep my son Caleb out of evil company, and from gaming-houses. And sanctify, O Lord, this night to me, by preserving me from thieves and fire, and make my servant honest and careful, whilst I, Thy servant, lie down in Thee, O Lord. Amen.'

GREENHOUSE AND WINDOW PLANTS.

Climbers.—Tie up climbers to the rafters or wires, and cut back the too rampant growers.

Annuals.—Sow seeds of annuals for winter flowering now, and keep in a moderately cool place, so that the plants will be stocky and healthy.

Bulbs.—Pot and put in a dark place all which are to be grown for winter flowering. After they have formed roots they must be brought into the greenhouse from time to time, as wanted.

Forcing Plants.—Where shrubs and herbaceous plants are forced for flowers, they should be taken up now and potted or planted in the cold frame or cellar, and then into heat as required.

Insects.—Before bringing a plant into the greenhouse, see that those left there are free from insects, and then that all that are taken in are first thoroughly examined, and all insects removed.

Hanging Baskets.—Re-stock with such plants as are fitted for the purpose and let them stand a few days in the shade, until they become established, when they can be hung in the house or greenhouse.

Everything should now be ready, so that there will be no delay in removing tender plants to the house or greenhouse whenever the weather shall render it necessary. The heating apparatus should be in order, else many plants might be lost by frost. Do all needed glazing and make everything tight.

Ferneries.—Remove the old plants, keeping only such as are worth saving, and plant ferns, selaginellas, and such as require a moist atmosphere. The ferns from the woods seldom do well in a case, as the fronds or leaves of most kinds die down to the ground on the approach of winter.

Window Gardening.—Plants that have been turned out into the borders, or those that have been plunged, should be taken up before cool nights check them too much, and placed on a veranda or other partially protected place. In potting, cut back all rampant growth. Observe the directions as to insects given for plants to be taken into the greenhouse—indeed nearly all in relation to the greenhouse is applicable to the window garden.—*American Agriculturist*.

UNIFORM WEIGHT OF COINS.—The Metrological Society has, through its president, memorialised Congress for the preparation of coins of metrical weight and uniform fineness, and for the passing of laws and conclusion of treaties whereby such coins shall become a legal tender, according to their weight.

STROKE OF ENGINES.—The stroke of an engine varies according to circumstances, which the designer must take into consideration, but the general rule is to make the stroke about twice the diameter of the cylinder. The diameter of the fly wheel should be about 4 times the stroke of the engine, and the rim should weigh about 3 cwt. per horse power.

THE DIGESTIBILITY OF MILK.—Dr. Carter of London, in a paper on the digestibility of milk, after discussing various methods which have been generally used with a view of promoting its digestibility, points out that their efficiency is essentially due to the dilution of the casein of the milk, thus causing the precipitation, on its introduction into the stomach, in granular form, of what otherwise would be firm, bulky, and compact. He has found by experiment, that simple dilution with water is insufficient for this purpose, and that this object is far better attained by admixture of alkaline or starchy water with the milk. He himself gives a decided practical preference to barley-water for this purpose.

BALANCE WHEELS.—Every balance wheel should be speeded up so as to run twice or three times as fast as the crank shaft it is intended to balance. When a balance wheel is applied in this way it makes the machine run a great deal more steadily, for, when the balance wheel is geared into the crank shaft, and runs two or three times faster than the crank shaft, it forms a power of itself, when going over the centre, which propels the crank shaft until it reaches the quarter where it again takes its power from the machine. Although it takes an additional shaft and gears to apply a balance wheel in this way, the saving of metal in the balance wheel fully compensates for the extra labour, for, when a balance wheel is speeded three times as fast as the crank shaft, it needs only one third of the metal in it that it would were it not speeded up at all, and if balance wheels were applied in this way generally, it would make all engines run far more steadily.