Budding in August.

August is one of the months in which this important operation may be carried on. Apples and pears are now in the condition of growth favorable to the proper insertion of the bud and its union to the stock. On account of the season, plums, too, may still be budded with some chance of success. To the owner of the small fruit garden, budding offers a fine opportunity for the improvement of the quality of his crop. By its use, trees which, on coming into bearing, are found to be of questionable value may be rendered profitable in a short time, without the necessity of tearing out and replanting. Also, by budding-in several varieties to the same stock, a much greater variety may be obtained from the same number of trees, a point of considerable importance where the garden area is limited.

Budding is nothing more than summer grafting. The process is more easily adapted to the skill of the farm fruit-grower, however, than grafting, being much simpler and consisting in the insertion of a single bud of one variety under the bark of another. The proper time for this part of the work is toward the end of the season of growth, just when the new wood is in a half-ripe state, yet when the bark still peels easily from the wood. The growth from which the buds are to be taken must be in the same condition as regards growth. The necessity for caution in choosing the proper season is that the bud must remain dormant till the following spring. If growth continues after the insertion of the bud, the latter may start a growth which will not have time to ripen before the severe winter weather sets in.

The stock having been chosen, an incision lengthwise and one across, in the shape of a T, is made in the bark, cutting to the wood. The edges of the bark are then raised from the wood till free. These operations are easily performed with a sharp, thin-bladed knife. A bud is now cut off from a branch of the desired variety, this being done by cutting on a slant from about half an inch above to half an inch below the bud, taking with it a thin shaving of the wood. The leaf, which is usually attached to the base of the bud, is cut off, half of the stalk being left to serve as a handle. The edges of the T incision now being raised, the bud is inserted at the top and pushed down between the bark and wood. Raffia or soft string is wound around the cut above and below the bud, care being taken not to actually cover the bud itself. In ten days or a fortnight, the union should have taken place and the bandage may be removed. If not a success, the bud will have shrivelled up. In the ensuing spring, the buds that have united will start into growth, and the wood above each bud may be removed. This forces all the energy of the plant into the new bud and gives it greater growth the first season.

P. W. HODGETTS.

Wellington Co.

Costly, and Claims too Much.

Chas. D. Woods, Director of the Maine Experiment Station, reports that a preparation called "Kno-bug" is being sent out by a Boston firm, who claim that it will kill potato bugs, act as a vegetable tonic, and prevent blight, scab and rust. According to analyses, it contains land plaster (87 per cent.), saltpetre (4 per cent.), ochre (2 per cent.), Paris green (2.5 per cent.). The remaining constituents are sand, clay and a little water. The ochre is evidently added to color the material so the plaster will not be readily recognized; the saltpetre is added presumably to give ground for the claim that it acts as a fertilizer. The clay and sand are probably impurities of either the ochre or the plaster. Whatever value the goods have as an insecticide depends upon the 2.5 per cent. of Paris green. No treatment of vines, so far as known, will prevent scab, and there is nothing in the goods to prevent blight. Applied in sufficient quantity, the Paris green contained in Kno-bug will kill potato bugs. These goods are sold for 10 cents down to 5 cents per pound, in accordance with the size of the package. With 2½ pounds of Paris green and 100 pounds of plaster mixed together, the farmer would have a material for practical purposes identical with Kno-bug, at a cost of less than 1 cent a pound.

Toronto Fruit Judges.

The following is the list of judges in fruit, recommended for the Industrial Exhibition, 1902:

Apples—Walter H. Dempsey, Trenton; T. H. Race, Mitchell; G. C. Caston, Craighurst.

Pears—George E. Fisher, Freeman; E. C. Beman, Newcastle; A. M. Smith, St. Catharines.

Plums and Peaches—W. W. Hilborn, Leamington; V. Cline, Grimsby; Wm. Orr, Fruitland.

Grapes—W. H. Bunting, St. Catharines; E. J. Woolverton, Grimsby; Alex. McNeill, Walkerville.

Collection—A. H. Pettit, Winona; R. Cameron, Niagara Falls; George Leslie, Leslie, Ont.

Thinning Orchard Fruits.

Apples, peaches and plums well repay careful thinning, especially in years giving a heavy yield. Its results are chiefly seen in larger, better-colored and better-flavored fruit, and in the decreased tendency to rot, particularly noticeable among plums. The Japanese varieties of this latter fruit, which are noted for their over-bearing qualities, require very thorough treatment. For best results, peaches also need to have a large amount of the fruit removed, and in the big commercial orchards of this Province, thinning is now regularly carried on during the early summer months. The process is likewise being gradually adopted with the other large fruits. To many growers, thinning may seem at first to be a waste both of good fruit and valuable time; but one soon finds that a slightly smaller quantity of A 1 fruit is worth from two to three times as much as a greater amount of highly inferior quality.

Thinning is generally practiced after the small, undeveloped fruits, due to ineffectual pollenization, insect stings, etc., have fallen, for then the exact amount of fruit likely to come to maturity can be estimated. It should be carried out before the over-load begins to tax the tree. Individual fruits should be left far enough apart so as not to touch each other. Plums may be taken off up to half size, and before the pit becomes hard; apples, up to one and a half inches in diameter; peaches, from one-half to three-quarters of an inch in diameter. The work can be cheaply done by the berry-pickers at odd times, where such labor is available.

P. W. HODGETTS.

Wellington Co.

ROAN QUEEN =47454=.

A beautiful heifer entered by Capt. T. E. Robson for the Shorthorn sale, on August 13th, at Hamilton, Ont. (See Gossip, page 571.)

August Gardening.

If the weeds have been kept well in check during July, very little trouble with them will be experienced now, as the first crop being destroyed before seeding, the annual weeds cannot flourish, and outside of such perennial pests as chickweed or pusley, plantain and couch grass, which sprout from the root, there is little trouble, the crops should now be luxuriant and very little space for weeds left except between the rows, where they can be kept in check with little labor. Where water can be secured, watering should not be neglected in dry spells, as it pays better than anything, except continuous cultivation, during August. It should be done in the evening if possible, as if put on in midday it rapidly evaporates, and, besides, is liable either to scald or chill the plant. If the soil is stirred or cultivated soon after, a mulch is formed by the particles of soil, preventing the rise of the water to the surface and holding it for the use of the plant. Where watering is referred to in these articles, it means a good soaking or pouring. A sprinkling, unless on some flowers, will do more harm than good, as the drops of water on the leaves attract the sun and scald and spot the plants to a great extent. By taking the sprinkler off the watering-can and placing the spout of the can near the root of the plant to be watered, watering can be very quickly done, as fast as a man can walk in most cases. Cucumbers, squash and cabbage pay best for watering, but tomatoes, although giving an immense crop, are rendered late in ripening, as heat is their great requirement.

Beans and peas need little care other than the removal of large weeds and shallow cultivation. The pods should be picked as soon as of eatable size, as if left later they get tough and stringy, and in the case of the wax beans are liable to rust and destroy both pod and bean. There is a remedy for bean-rust in Bordeaux mixture, as is used to destroy scab on apples, but as this is highly poisonous, it should not be applied after the pods begin to form. The pea louse, or aphis, is a serious pest this month, and is about the hardest to fight or exterminate. If the first arrivals are sprayed with kerosene emulsion or tobacco water, there is seldom trouble, but if not attended to they multiply with great rapidity, and if the vines are sprayed the foliage is destroyed as well as the aphis. The only remedy appears to be to brush them off the vines with small branches and then cultivate before they can get a chance to get back again.

Beets, parsnips and most other root crops are immune from insect pests, and thorough cultivation, resulting in the destruction of weeds and the conservation of moisture, is all that need be done to secure a good crop. The carrot-rust fly, which deposits its eggs in the soil around carrots, the maggot afterwards burrowing into and destroying the root, can be prevented to a great extent by liming. Some dry, powdered lime sprinkled along the rows and worked in the first half of the month, I have found to be a good remedy; but this pest is not widespread, and, taking it all together, root vegetables require little attention.

Cabbage, cauliflower, etc., need to be kept cultivated not too deeply so as it might injure the roots. If the large green worm appears, the plants may be sprayed with diluted Paris green or hellebore, but after they begin to head, hand-picking is the only remedy. Poison applied while the head is forming is a dangerous practice.

Cucumbers need to be picked as fast as formed, or the vines will soon stop bearing. Frequent watering will make the fruit more uniform and keep them from becoming bitter, as they are very liable to do in hot weather. Unless the tomatoes have had some support given them during the previous month, they should be tied up and the ripening fruit kept off the ground. If this cannot well be done, a shingle placed on the ground under each large cluster is of great advantage, and will prevent much loss by cracking and rotting. If they are very leafy and the fruit seems slow to ripen, I find going over them with a sharp knife and cutting out all the unfruitful branches, besides shortening the bearing branches somewhat, a great improvement. The sun thus reaches green fruit and ripens many of them. Where tomatoes for pickling or chowchow are wanted, late plants set out where early potatoes have been taken from, and kept watered, will give immense quantities of green fruit, especially if the ground is very rich and shaded. Late potatoes and corn need to be hilled during the month, but not high, the advantage in the case of potatoes to prevent the exposure of the stalk and roots to the sun, and of corn to steady the plant so that the wind will not have such an effect on it. Shallow cultivation or undertillage is now depended upon almost exclusively for the benefit that formerly was thought only possible by hilling.

The fruit portion of the garden after the berries are gathered needs very little care till fall unless to keep down insect pests and promote ripening of the wood for the following season.

EDGAR MACKINLAY.

Halifax Co., N. S.

Currant Bushes Destroyed.

What is the best thing to do with currant bushes that have had their leaves dried up and crops nearly destroyed with worms? Would spraying be good, and with what material?

Lambton Co. MRS. WALTER MILLAR.

Ans.—When the leaves have once been destroyed, there is no solution which if sprayed would act as a restorative. Where the worms continue to be troublesome, use hellebore as directed in the last issue of "Farmer's Advocate."

Lay your plans to attend the inauguration, on Aug. 13th, of breeders' sales of Shorthorns at Hamilton, Ont.