

between this stage and its final maturity. This kind of legislation is the dealings between farmers and men. It is always a few make legislation necessary

when the fact is that if the dairy farmer depends wholly upon his own farm for his feeds and purchases no fertilizing materials he will exhaust the fertility of his soil as certainly, and almost if not quite as rapidly, as the grain farmer."

HORTICULTURE.

In growing beans in the home garden earliness is a factor. Some risk of frost is, therefore, worth while.

Spraying for oyster shell bark louse is much more important than many people seem to think. This orchard pest will kill trees just as well as San Jose scale, but it takes longer.

Be sure the spray outfit is in good shape before starting in. It may save many vexatious delays. Moreover, don't skip any more sprays than you are actually forced to.

No time should be lost in getting early cabbage plants in the field when the time arrives. If the plants have been well hardened they should stand some severe cold in the field—as much as ten degrees below freezing.

Asparagus beds should not be cut before the third year, and then only for three or four weeks. Older beds are sometimes cut for as long as 8 or 9 weeks, although 6 or 7 weeks is the usual period. Cutting should cease whenever the shoots begin to show weakness.

A strong one-year-old crown is superior to older crowns for asparagus. The richest soils are necessary to grow good crowns in one season, however, and seed should be sown in the spring as soon as the ground can be prepared. Thinning is frequently necessary to prevent the production of weak plants.

At the Illinois experiment station no marked difference was observed in the growth of trees propagated from robust scions and those propagated from scions of small diameter. It was found that there was no difference for propagating purposes between buds of large size and those of small size. Neither does it matter apparently from what situation on the tree the buds are taken.

A study of the wholesale prices and receipts of apples on the Boston market for the past 36 years shows that the last ten-year period shows a slight decrease in receipts over the previous period. Most varieties show a decrease in price for the first three periods, but with a marked increase during the last ten years. More than half the apples are received during October and November, and receipts are heaviest in November and highest in June.

At the Missouri experiment station it was found, when conducting fertilizer experiments on eight crops of lettuce and four crops of tomatoes and cucumbers, that "acid phosphate, the only commercial fertilizer which at present can be procured at reasonable prices, when used alone, gave a very consistent increase on the lettuce crops in every case, except where mulched with straw. Similar results were secured with tomatoes and cucumbers.

Grading of Potatoes and Onions.

EDITOR "THE FARMER'S ADVOCATE":

Of recent years a great deal of consideration has been given to the question of onion and potato grading. Many large marketing organizations have recommended that steps be taken to have legislation passed which will render compulsory the grading of these commodities. Individual growers, as well as wholesale dealers, have made similar recommendations. During the four years of war, however, the Dominion Department of Agriculture, to whom these suggestions were made, deemed it wiser to direct every effort towards increasing the production of vegetables in order to save wheat, rather than do anything which might have a tendency to interfere with production. For this reason the question of compulsory grading has been left in abeyance.

About a year ago optional potato grading laws were put into effect, and were enforced by the Dominion Fruit Branch during the past season. These were satisfactory as far as they went, but as they affected only shippers who graded their potatoes No. 1 or No. 2 and did not affect those who preferred to market ungraded stock, the benefits resulting from the system were of necessity limited. With the cessation of hostilities, and with all lines of commerce and industry endeavoring to adjust themselves to the present era of reconstruction, the question has again presented itself and must now be carefully considered on its merits.

Looking at the matter in a general way, primary consideration should be given to the benefits which would result from legislation compelling growers and shippers of potatoes and onions to grade these commodities in accordance with Government standards. The greatest of these benefits would probably be the mutual understanding which would be created between buyer and seller. In the past there have been many instances of cars of vegetables being refused at destinations on account of declining markets; the result has been that the shipper, often far removed from the consignee, has been obliged to accept a lower price in order to dispose of his goods without further difficulty. There have been probably as many instances in which consignees have received goods of inferior quality, and

have been obliged to enter into extensive negotiations in order to effect a satisfactory adjustment. These and similar difficulties would be greatly lessened by a system of compulsory grading subject to Government inspection.

The marketing of very small and inferior potatoes and onions would also be prevented and a large quantity suitable for stock feed, which should never leave the farm, would thereby be kept out of our large consuming centres. In this connection it is important to note, however, that requests have been made for provision, in the wording of the necessary legislation, for the marketing of new potatoes during the months of July and August. There is a considerable demand for these potatoes, which are smaller in size than would be permissible in graded stock. Compulsory grading would also do much to aid Canadian shippers in foreign mar-

benefit to all concerned, will increase in value with each succeeding year.

Before any steps are taken in the direction of legislative measures, and before definite grades are defined, the views of representatives from all provinces will be obtained, and every consideration given to the whole question from every standpoint.

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The New Strawberry Planting.

The strawberry is one of the most cosmopolitan of fruits, both as to its general popularity for table use and its climatic adaptations. Like all crops that need considerable hoeing and cultivating, its chief disadvantage lies in the amount of labor necessary to ensure the best growth of plants and control weeds. On the other hand, the strawberry is easily cultivated, requires no unusual skill to produce good crops, and when good crops are produced they usually show more than average profit. This is especially true at this time, for the reason that the acreage under all small fruits has fluctuated very markedly during the last few years, with a general downward tendency, so that prices have been unusually good. Of course, one must not forget that labor, boxes, etc., have also risen in price to a very great degree, but we believe it to be pretty generally true that so situated as to get what labor they need for cultivation and harvesting, strawberries have been a very profitable crop.

Soils for successful strawberry growing may be of widely varying type, if varieties are properly chosen and if drainage and fertility are good. However, where possible to secure it, a sandy loam is best, and it should be warm. Strawberries can be grown on low-lying land but such land is inclined to be cold and exposed to frosts. Moreover, earliness is not so likely to be secured. A southern slope is conducive to earliness, but will not necessarily produce the greatest quantity, nor the longest picking season, due to greater exposure to warm, drying winds. The earliness of the crops can be regulated to a certain extent at least by the grower, if a winter mulch of straw or strawy manure is used and not removed for some time longer than it would naturally be, or until the plants begin to suffer from lack of sunlight. Whatever soil and location is chosen, care should be given to the matter of drainage and moisture in the soil. Strawberries need large quantities of water, especially during the harvesting season which is often dry; and soils should, therefore, be of such a nature as to hold no surplus water which will prevent early growth in the spring, but will, at the same time, hold water for the ripening fruit.

Spring planting is recognized as most desirable, and where a commercial field is contemplated a year's preparation, especially if the land has been in sod, will be of great advantage in putting the soil in condition and freeing the land from weeds by the cultivation of some hoed crop. White grub is a very serious strawberry pest, and is usually much worse in land that has recently been in sod. It is on account of this serious evil that sod lands that have been down longer than one year are not recommended. Manuring for strawberries can be very heavy, but it is much better if the land is in a natural state of high fertility than if very large quantities of manure are applied especially for the strawberry crop. In such cases the manure should be applied in the fall so that it will be well rotted by spring. Manure should be well incorporated into the soil by planting time, and land should be in as fine a state of tilth as it is practicable to get it.

Fields are usually marked out with a marker, and the plants set by a man and a boy, or by men working in pairs. It is, of course, not necessary to mark deeply, but the rows should be straight and well defined. The distance of planting varies according to the ideas of



A Three-acre Potato Field on the Farm of Oswald Attwater, Timiskaming.

kets, where competition is now very keen. At the present time, for instance, Canadian potatoes are shipped in large quantities to American markets and to the West Indies, and come into direct competition with United States potatoes which are graded. This has, in the past, affected the sale of Canadian-grown stock, and Canadian shippers have been obliged to accept proportionately lower prices than those paid to American shippers.

In order to obtain an expression of opinion upon the subject of compulsory grading, the Dominion Fruit Branch has communicated with practically all the leading shippers, associations and wholesale dealers in Canada, pointing out to them the possibility of legislation being introduced. The replies received have been many, and the expression of opinion has been practically unanimous in favor of a compulsory grading



A Tree That Needs Feeding.

Trees must be well fed and vigorous to produce good crops of fruit.

system. The proportion of dissension has been only about two per cent, and this small minority is probably influenced by purely local conditions. It is, therefore, quite apparent that the introduction of compulsory grading would meet with general approval in all parts of the country.

It is interesting, in this connection, to refer briefly to the history of the Fruit Marks Act, which was introduced into Canada at a time when fruit packing was probably at its worst stage. During the past eighteen years the improvement in the grading and packing of Canadian fruit has been very marked, and at the present time the enforcement of the Fruit Marks Act consists largely of maintaining the high standard of grades which have been effected since the original introduction of these laws. It must, therefore, be expected that the grading of potatoes and onions, while of immediate