chickens by lamp light they should continue, and do the feeding at regular periods.

The nature of the mash fed will depend largely upon what the feeder has to hand. Milk is usually an integral part of the ration, and sour milk or buttermilk is preferable. Many rations are advocated, among which may be one of equal parts of oat meal, corn meal and barley meal, mixed with sour milk or buttermilk. Another which should nick in very well on the farm is composed of two parts of finely-ground oats, one part of finely-ground buckwheat, and one of finely-ground corn. To this is added sufficient sour milk or buttermilk to make a batter, or ordinarily about two to two and one-half pounds of milk to one pound of grain. Good results have also accrued from feeding a ration composed of equal parts of corn meal, middlings and buckwheat meal. Frequently barley meal can be substituted for the buckwheat, or oat meal for the middlings. Some form of animal food is advisable, and if milk is not obtainable blood meal and beef scrap can be substituted, but it is not wise to allow the grain ration to consist of more than 15 per cent. of these foods. Just as good results are obtained by feeding these rations cool or cold as warm, and some recommend preparing the batter twelve hours prior to feeding.

Some little technique is required in feeding the birds properly when put into the crates. should be starved for twenty-four hours before being allowed anything to eat, in this way they start off with a keen appetite, and gains are always more rapid. Feeding should not be always more rapid. Feeding should not be heavy at the start. One ounce per bird at a feed is sufficient to begin with. This can be increased, but they should not be fed more than they will clean up in about ten to fifteen minutes. Unless they be exceedingly large they will not consume much more than 3 ounces per bird at any time. It will probably take two weeks to get them to full feed, and this increase should be made by very slight degrees. Any food remaining in their troughs after ten or fifteen minutes should be removed, and the troughs thoroughly cleaned. In warm weather they will require water at noon, but ordinarily the milk in the ration will supply all necessary drink. Cleanliness is an important factor in this operation, and utensils connected with the feeding should be frequently cleansed. The birds require grit, and all vermin should be kept down by dusting with a little sulphur.

The average birds make the most economical gains during the first two weeks of feeding. It seldom pays to feed much longer than three weeks or twenty-four days. After this period the added gain is not sufficient to return a profit. Frequent weighing will carry with it the information that feeders desire regarding the increase in weight, but so long as the birds have sharp appetites on full rations they will probably be making profitable gains.

# HORTICULTURE.

### A Perennial Vegetable Bed.

One of the earliest and nicest vegetables in the spring of the year may be gathered from a small bed of asparagus. On the urban table asparagus is considered with much relish, while many country homes are without it. This seems strange, indeed, for a small patch at the side of the garden or in the corner will year after year send up its succulent and toothsome little shoots. A good garden is one of the blessings of rural life, and occasional winter evenings should be spent planning for the season which is to follow. peculiarity of the plant, which perhaps discourages the gardener, is that it requires about three years to come to a healthy, productive age, yet it can, where discretion is used, be cut the second year. However, a small area will supply one household and the years will speedily slip by coming to the time when the asparagus bed will be cherished each spring.

The plant may be propagated either from seed or roots, but, owing to the period required for it to come to maturity, it is often cheaper and more expeditious to make use of the roots rather When seeds are used one ounce will produce about four hundred seedlings, and they can be transplanted after one year's growth to the permanent hed. They are first started in a seed-bed with rows about sixteen inches apart, and the seed is covered to a depth of about one inch. Spring is the proper time for transplanting young asparagus roots, autumn transplantings are unsatisfactory. The depth roots should be planted for permanent production varies with different gardeners, but they should not be planted less than six inches deep, neither should they be covered to the full depth at once. Three inches of soil on top of the roots will be sufficient for a start, and, as the young shoots come up, the surrounding soil may be cultivated in until the surface of the ground is level. which are above the ground die in the autumn, After the shoots they may be cut down with a sharp hoe or other implement and the whole area cultivated over to a depth of three or four inches. A similar cul-

tivation should take place in the spring, and the young shoots which come up should not be cut the second year, except very occasionally. ing the third year the bed will be in a condition to furnish shoots of asparagus for the table. Some cut them about two inches below the ground, which leaves only about two inches of bleached stock, the rest being green. This is satisfactory on some markets, while others require a greater length of bleached stock. For home use one can suit their own tastes, but markets cannot be dictated to to any great extent. Where a greater length of bleached stock is required, a coating of coarse manure or leaves will provide more shade and a greater length of bleached stock. country cuttings should not be made after from the middle to the latter part of June, subsequent to this the shoots which appear should be allowed to grow and mature, for the next season's crop depends upon the food material stored up in the roots consequent upon a healthy growth above the ground in autumn.

The accompanying illustration shows part of a field of asparagus photographed about the middle of July. The asparagus in some parts of the field was as high as a man's head, while the ground shows a good surface mulch and freedom from weeds. Such a healthy appearance in the late summer and autumn insures a good crop the following spring.

Asparagus in the Autumn.

This illustrates the healthy growth that should be allowed in the asparagus field during the sammer.

The following season's crop depends upon it.

### Good Out of Evil.

The year 1914 will be remembered by fruitmen as a season when nature combined with man's intelligence and care to produce a good crop, yet other men so upset social, political and economic conditions that all machinery failed to market the output in anything like a satisfactory manner. Out of this failure to market the crop, out of temporary discouragement, perhaps, and out of all the disruption of trade and commerce, there appears the plumule or little plant representing the germ of a great campaign. The seedling, we hope, may develop into a large tree, sending its branches in all directions, reaching even into the hinterlands of Canada. This tree should stand as a tree of knowledge, educating the eight milions of Canadian people to a recognition and appreciation of the Canadian-grown apple.

To the mind unschooled in building up a trade this may appear like "playing business, perience in fruit lines among our immediate neighbors shows it to be real business in the last Untiring and well-directed advertising raised the banana trade in the United States from an insignificant pursuit to an enterprise represented by fifteen millions of dollars. Constantly before the American eye is a halved grapefruit or orange, and so persistently has the housewife and bread winner been told of the virtues of citrous fruits that one hundred thousand cars represents the volume of that trade. Natural desire on the part of consumers are not responsible for great develorment of the fruit industry of the South; it is the outcome of a persistent and preserving campaign of education. are the prime recessities of life. Fruit is a luxury in hard times, for people can live a long time without it, yet to maintain the best of health and to keep oneself one hundred per cent. efficient, there is nothing that can take the place

of fruit in the diet. Citrous-fruit growers used this argument in connection with their business, why should not the Canacian grower present his claim to his own people.

Seeing the great success of the citrous-fruit growers in their educational campaign, the apple growers of the Western States wakened up to a similar endeavor. This effort grew, and in the budget brought down before the annual meeting of one large association alone was a bill of \$60, 000 for advertising. The bill passed without a dissenting voice. With all the fruit growers of Canada assembled in one great conclave, such a bill as this would strike terror to their hearts. At a time when fruit is going to waste we find our Government in a half-wake attitude publishing a book of "209 ways to serve apples," and spending a small amount bringing it to the attention of the consuming public. move is commendable, but the idea is too late be-As a start the ing born, for the Government needs its revenues at the present time, and a campaign such as that requires years instead of weeks to reach an appreciable stage of fruition. Ten years ago fruit growers should have commenced to shout, from house tops, the virtues of an apple, and should have devoted one cent per barrel towards educating the consumer to use more apples and fewer citrous fruits. The toll from the million barrels produced in Nova Scotia would have amounted to \$10,000 per year, and one cent per barrel would never have been felt by the grower. Ontario, Quebec and British Columbia could all contribute a like percentage with ease, and \$25, 000 each year would have made the Canadiangrown apple king of all fruits.

At one time it was felt unnecessary to champion the Canadian-grown apple, but while Canada was dabbling in European markets, the Northwest Fruit Distributers of the Western States sold apples in 33 cities in six Canadian provinces. Heavy importations are indicative of prosperity, yet growers are not obliged to waste their product to keep up appearances. cess of the United States grower in the West depends on one of the most complete organizations known to fruitmen. Its members number 8,350 growers sub-divided into 116 local associations. With this machinery they employ the best men to be found, and so effective are their efforts that last year they distributed fruit in 243 cities in 33 States of the Union; 33 cities in 6 Canadian provinces; 16 cities in 10 European nations, and to every continent in the world except Asia. Caradian growers are not, perhaps, as much centralized as are those of the Western States, and as yet Canadian co-operation in fruit lines is still in its infancy. With greater organization should come a determination to show Canadian consumers how good the Canadian-grown apple really is, and to do this it is worth \$50,000 a year to the grower. Results may not appear in one year or two, but they will come as they have come in other districts, and the attempt being made this year should not be allowed to die out An effort with a purpose healthy consuming public, and a more prosperous apple industry.

#### Apple Prices.

There is an improved feeling in the local market owing to lighter shipments, due probably to the low prices prevailing of late, but at the steader prices No. 1 Greenings in round lots being quoted at \$2.25 per bbl., but anything fancy in the shape of rosv red fruit, such as McIntosh Red would bring \$3.00 to \$3.50 per bbl., but for the general run of No. 1 offerings \$2.25 is all that can be depended on, and No. 2, \$1.75.—Montreal Trade Bulletin.

## FARM BULLETIN.

#### A Warning.

By Peter McArthur. This morning I spent an hour reading the editorial pages of four daily papers—two Conservative and two Liberal. They were all important papers, party organs to which I have been in the habit of looking for party news and To my disgust I found that all four were sparring for position in case there should be a general election at an early date. is trying to fix the blame on the other for dis-Each party turbing the country with an election, and each is apparently wanting an election. As nearly as I can determine the Liberals want to turn out the Conservatives because they are incompetent, and the Conservatives want to condemn the Liberals to another five years of Opposition because they are disloyal. Could it be possible to devise two more offensive issues to place before a people whose every nerve is at the highest tension because of the war? Politicians who would date to debate such issues could only be compared to fools who would play with fire-crackers on the brink of perdition. They are not issues that could be calmly debated in a time of peace, and to raise them now would be both insane and

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Issues

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Receipts a Toronto, or bered 129 1,117 hogs, 282 horses. about stead steers, \$7.2 um, \$6.25 bulls, \$5 to \$6.75 for go \$4 to \$5.75 Calves easie ing more free Sheep, \$5.50 \$2.50 to \$4 culls, \$6.50. **\$**7.50; **\$**7.1 weighed off REVIEW OF The total

City and Un week were:

Cars
Cattle
Hogs
Sheep

The total r two markets of 1913 were

Calves