CARE NEEDED

at Harvest.

IN THINNING

Stand of Plants Should Allow

No single process in connection with the growing of field roots—mangels, turnips, carrots, etc.—is more important than that of thinning the young plants. Size and weight of the individual roots depend largely of the individual roots depend largely of the yield depends entirely on the exactness of the stand of plants left after what are considered the surplus ones have been removed. Not only proper distance between the plants is necessary, however; the thinning must be done in proper season, if the crop is to attain the greatest possible growth and full maturity before harvest time.

To the fact that the British farmer

growth and full maturity before navest time.

To the fact that the British farmer and his help are experts in this matter of thinning may be credited the greater average yields of field roots in that country than in Canada, or very largely so. Not many Canadan farmers make a regular practice of growing roots on any extensive scale, but those who do may be credited with giving a good attention to the fertility and state of cultivation of their soil for that purpose, as does the average British farmer.

No Hard and Fast Rule.

for No Waste Space in Row

OF ROOT CROP

GOOD REASONS FOR BREEDERS **SHOWING STOCK**

Prominent Breeder Empha sizes Some of the Important Points

With the Western Fair circuit opening at Caigary on June 30, live stock exhibitors in all parts of the Dominion will soon have reports of performance in the show ring to incite them to special effort in preparing their stock for exhibitions that are to take place later in the Summer and throughout the coming Fall. In Eastern Canada, farming conditions are such as to make the Pall. In Eastern Canada, farming conditions are such as to make the Fall the most desirable season for holding shows of farm produce and animals, but the time is already close at hand for beginning to put live stock in proper condition for exhibiting at some of the earlier shows. Some farmers question the advisability of exhibiting their stock, generally on the head of the direct financial returns from the undertaking. Indirect returns are, however, worth considering, as are other points in connection with the matter of exhibiting, as shown by Alex. Hume, of Campbellford, Ont, whose expression of opinion on the matter of showing pure bred cattle, reproduced from his article in the Canadan Ayrshre Revew, is as follows:

All Should Exhibit.

Earliest Crops Are Money Makers

The early bird gets the worm, and likewise, too, it is the earliest crop that gets the high price on the vegetable market; the man who gets the top prices. The question then resolves itself into how the earlies crops are to be obtained.

Real earliness cannot be obtained.

Real earliness cannot be obtained without some means of forcing at least at the start under glass. Owing to the heavy outlay involved green-houses are out of the question except with the larger growers. The small pyramid shaped forcing frame is excellent but is limited to special crops and involves a heavy outlay compared with the many uses of the ordinary hotbed.

It may be argued that the hotbeds are expensive to either make or buy, but when the cost of buying plants ready to set out is figured up each year the wood putty glass and labor or the ready made hotbeds soon pay for themselves.

soon pay for themselves.

As to the type of hotbed used the three run frame, that is, having the glass in three runs, is better than the four run in that it gives less shade but is slightly more expensive and taken all in all the four run is probably the more popular. Another question arising is whether butted or lapped glass is the better. This, again, is really an open question. Lapped glass, with one pane lapping over the other, is not quite as bright owing to the double thickness of glass at the laps and the dirt that collects there. The butted glass frame, on the other hand, is not as tight and the drys is an undesirable factor where the damping off fungus and diseases are an ever-present source of loss. However, butted glass slightly less expensive and probably in the long run is more used.

ased.

As to the size of the bed, that of course depends on the grower and his requirements, but the size most generally adopted is 6 feet long by 3 feet wide if a single frame bed or the bed may be made of greater length with cross braces at intervals to support the frames. The size of lumber most generally used is 2 in material, 24 in wide for the front and 30 in, for the oatch with the ends graduated from 24 in at one end to 30 in, at the other.

With regard to the getting up, of the bed, the pit type of hotbed has its advantages but on account of the ease of working over a higher bed set on not in the ground and the better drainage secured the style of hotbed burn on the ground is almost everywhere preferred

style of hotbed built on the ground is almost everywhere preferred to the pit type.

Horse manure is the material most commonly used actuough results have been secured with cornstalks in some parts of Ontario and with spent hops in certain other sections. The manure must not have beath and should not be too strawny. The rule is that at least about 8 inches of manure is required for each week's heat required. In other words a pile when tramped of from 2 feet to 30 inches high will be required for getting a three week's start. Two to three weeks must be allowed for such a pile to heat after tramping. After the centre has heated, usually six to eight days are required till this takes place, the pile is turned over, top and sides are turned in replacing the centre which has heated. In order to get the bed heating evenly, care must be taken to have the manure hase has been thoroughly prepared and after the frames have been put in place, the soil is put on to a depth of 6 inches. That the soil should be fairly rich, fine without lumps or stones and perhaps have some sand added goes without saying. One thing often used where obtainable to start manure that has frozen during the making up of the bed is spent hops in the ratio of one forkful of hops to 5 of manure. The usual cure for frozen manure is hot water poured on in a quantity just sufficient to thaw out the manure. No hard and Fast Rule.

No hard and fast rule as to distance the turned in replacing the centre which ed heating evenly, care must be takbaken and thoroughly tramped. Afonghy prepared and after the oil is put on to a depth of 6 inches. fine without lumps or stones and without saying. One thing often nure that has frozen during the makther ratio of one forkful of hops to rozen manure is hot water poured aw out the manure.

Cucumber Mosaic And Methods of Controlling

Carried to Healthy Plants by Beetle—Quite Common in No. 100 in the case of each different type of root is more or less established. In any case, the distance apart of the rows, in regular farm practice, is sufficient to allow the roots to make full size without crowding in that direction, and no great amount of experience in root growing is needed to the grower if he is wasting land by placing his rows too far apart. It is in the matter of spacing in the row that most careful calculation is necessary and this calculation must be made on the strength of average size attained by the particular type and variety of root grown, when that kind of root is in condition to supply the greatest possible amount of feed value. That is, occurse, considering roots from the standpoint of their value as stock feed.

Suggestions For The

Shippers Should Use Square Box-Hints for Cultivation

Modern milling of the world's best wheat, naturally produces the world's best flour.

Ask your grocer for the best and he will

'More Bread and Better Bread"

Small Fruit Grower Methods of Controlling

Beetle-Quite Common in New Brunswick.

Control measures so far suggested or discovered are not entirely successful. Since the disease is carried by the cucumber aphis and beetles, first from the wild Cuburbits to the cultivated crops in early spring and later spread from diseased to healthy plants in the field, and since it is also spread by the pickers, certain measures may be taken towards reducing the amount of infection. These are:

(1) Control of aphis and cucumber beetles.

(2) Destruction of wild Cucurbits,

Cucumber Mosaic And

How To Treat Tip Burn of Potatoes

A trouble which is widely distributed and very prevalent in some seasons, and to which the name "Tip Burn" has been given, is to be found among our potato crops. This trouble takes the form of a gradual burning and drying-up of the leaves of the plants, often commencing at a comparatively early stage in their growth and, in many cases if allowed to go on unchecked, slowly but surely involving the whole of the plants so that they die down a considerable time before the tubers are fully developed.

growers for Late Blight. There is, however, a marked distinction between the two, for Late Blight may commence by attacking any part of the plants—leaves and stems alike—has a dark, water-soaked appearance and, in its early stages, is damp to the touch, while Tip Burn invariably commences at the margin or tips of the leaves and has a decidedly dry appearance and touch with the exception of after rain. It also appears much carrier in the season than Late Blight has ever been recorded and does not cause the death of the plants so rapidly. Nor has it ever proven so destructive as Late Blight, although evidence has been obtained that in seasons when it is severe and where no effort is made to check, a considerable reduction in the yield of marketable tubers, due to the premature death of the plants from this cause, may result.

Investigators of this trouble are not yet in agreement as to the cause. The observations of some have led to the helief that a period of hot, dry weather during the growing season causes the leaves throw off moisture more rapidly than it can be furnished by the plant. the result being the appearance of Tip Burn. This theory seems how-ever, to be disputed by the fact that the ticuble is not found in the het regions of the Western Scates where the temperature often comes excessive and the air is especially dir. More recent investigations lead to the belief that this burning of

the leaves probably follows the depredations of sucking insects. These investigations are not yet complete, but enough evidence has been pests thoroughly under control in an endeavor to avoid Tip Burn.

We have found in our experimental work with potatoes that Bordeaux mixture will to a large extent control this trouble. In 1918, when it was extremely prevalent, we had several plots to which, for the purposes of experiment, Bordeaux mixture was not applied. These plots suffered from a severe attack of Tip Burn and the plants were all killed down by the second week it August, while other plots on the same land, and to which, for the control of Late Blight, Bordeaux mixture was regularly and thoroughly applied, suffered to a very slight extent only, the plants remaining green until frost came. Bordeau mix-ture acts as a repellent to the Leaf Hopper, as well as a protection to the plants. Many other cases, in addition to that referred to, have come to our attention, bearing evidence that regular and thorough spraying with this mixture will reduce to a minimum the ravages of

GEORGE PARTRIDGE. Assistant Plant Pathologist, Experimental Farm, Ottawa.

Plan For Clover Seed Efficient Use of Labor Gives Profit For Next Season Now

Relationship Between Size of Cut First Crop of Red at

Customer (yelling loudly)—i wanna get a pair of socks.
Clerk—Well, you you think that a mi deaf?
Customer—No, I'm tryin to make myself heard above these ties.

Particularly those known to be susceptible.
Carthous as seen as detected. This is not entirely reliable as diseased plants are infectious some time before the symptoms appear.

(4) Avoid picking the fruit fron (4) Avoid picking the first signer (4) Avoid picking the fruit fron (4) Avoid picking the fruit fron (5) Customer (yelling loudly)—i wanna set a pair of socks.

I arger size than his managing ability warrants.

A farm business that entails too much labor for one man and yet not enough for two men is out of balance and not likely to be as profitable as it should be. A farm business just large enough to keep one man fully employed, but on which the labor of two or there men is being expended, can not be profitable, since efficient use of inbor can only be secured by adjusting the individual to the farm business to the individual to the farm business to the individual to the farm business function of infected the individual to the farm business to the individual to the farm business function of the profitable, since efficient use of inbor can only be secured by adjusting the individual to the farm business that entails too much labor for one man and yet not enough for two men is out of balance and not likely to be as profitable as it should be. A farm business just large on the profitable, since efficient use of inbor can only be secured by adjusting the profitable, since efficient use of inbor can only be secured by adjusting the profitable, since efficient use of inbor can only be secured by adjusting the profitable as it should be. A farm business just large on the profitable, since efficient use of inbor can only be secured by adjusting the profitable as it should be. A farm business that entails too much labor can be profitable as it should be. A farm business that entails too much labor can be profitable as it should be. A farm busin

Margaret, where is your little sis

YEAR TO CULL A FARM FLOCK

low to Read the Signs of High Producing Ability in

The hatching season should now be over on the well regulated poultry plant and attention directed to cullgrowing youngsters.

In the first place there should be rigorously culled from the flock all birds that show any physical defects such as crooked beaks, backs or breasts, excessively long toe nails, sunken eyes and long "crow" head, knock knees or other signs of poor tamina and low "vitality."

should be marketed as soon as they stop laying, show signs of broodiness or moult.

When trap nests are used, this condition is readily noticeable but if not the bens that have stopped laying can be easily distinguished by their shrinking comb and fading color of face and wattles, also by the contraction of the pelvic bones.

These bones, slightly protruding on each side of the vent, remain spread to the width of about three fingers as long as the hen is laying. In the poor producer they will be found closed to the width of only one finger and when the latter condition is evident early in the season, when she should be still producing, it is a fairly good indication that the bird has given up too soon and is not the type that makes the high record.

Vigor, health and high producing qualities are shown by distinctly visible characters and all birds that don't carry these qualities in a marked degree should disappear from the flock.

How To Tell Good Ones.

For Next Season Now
Cut First Crop of Red at
Once and Use Second
Growth for Seed.

It is wise to plan for a supply of red clover seed for next spring without having to buy. This can be done by cutting an acre of strong growing clov-



PROPER TIME OF

Fowls.

ing the flock to make room for the





2 3.4.5 7 8 9 10 30 24 26 25 24 25

DONT YOU KNOW YOU SHOULDN'T BROTHER PUT THAT IN HIS MOUTH!! IT'S

Dear Chums:—

I keepe some of you at least, were able to see the very fine direas which has wisited our province during this week. Effew! I dit wish that the C. C. members sould all have attended the believe together. Next best wish for you is that was not rear enough to ull the nelcos and nephews, and sorry and the nelcos and nephews, and sorry and it too. Yes, kiddles it was a splendid circus. The horses were particularly sond, both, in appearance and in clevity acting. They looked well cared to it away way and so did the many other animals. The trained dogs and seals gave very good acts and the laster of course are more rare on the stage, so probably caused us to wonder at and admire more their knowing ways. When one seal actually played a time through on an instrument, it was surely "the limit" for surprises. Of course the hipopotams was there as large and ugly as usual, all keeping within their own cages of course. The monkeys were the year the course are after a stage of course they don't always see and it was difficult to learn of their names. One pair attracted my attention particularly, they were llamss and were greatly admired. Their necks and heads are many than the comels, but of course they have no hump on their well shaped and thickly covered backs. They are peally, very pretty animals and seemed to enjoy being patted by many girls and boys.

The big heavy elephants were there in plenty and they had such gorgeous

A Regular Saturday Pa

Weekly Chat

really, very pretty animals and seemed to enjoy being patted by many girls and boys.

The big heavy elephants were there in plenty and they had such gorgeous robes of velvet trimmed with gold braid. Each one in a different color made them appear almost handsome if you can imagine such a thing being possible. Anyway they performed well and did many clever stunts.

So much for animals, but it would be impossible to write a description of the acrobatic acts performed by men and women, girls and boys, and of the ridiculous funny nonsense provided by the many clowns. They always keep the show lively you know from start to finish and never allow a quiet moment from the first to the last of the performance. This is not cat all a full description chums, but just a help to those who were unable to be present. For today you will find some reading on our page about these animals and, just try and imagine you gire at the circus while reading this good con.

With heans of good wishes for you.

With heaps of good wishes for you. UNCLE DICK.

In India they've Elephants And Rickshaws in Japan. In Kensington the residents Have Motors and a Man.

They've Bullock-bandies in Ceylon With humpy little Bulls. There's Passengers at Paddington, By Railway-station-fulls.

CIRCUS TIME.

That's got the movies beat!

There's Dogs to drag the Esquimaux, And Camels on the Nile. By taxi-cab to Pimlico K's only half a mile. At Margate there are Donkey-carts
And Ponies on the Sands;
And Ships that go to Foreign Parts,
And 'Scursion Boats and Bands. There's Undergrounds and Aeroplanes
And Bicycles of course;
But best of all is, when it rains,
There's Bobby's Rocking-Horse. -Sedgwick Barnard

Gee whiz! this morning early
A man came down the street There's every kind of monkey— There's camels and a clown! I didn't know the circus Would to soon be in town!

You're going to take us, aren't you? We'll simply, have to go! They say that there was never BEDTIME PENCIL