

crop on sets with only one germ, I am quite sure that the reason the ashleaf fails so often is, that too many germs are left, this potato being, probably, more fully supplied with eyes than any good sort we grow.

A fair allowance I conceive to be two eyes to the set, and the tuber may be either cut into sets at that rate, or, if it be thought desirable to plant whole tubers, the overplus of eyes may be cut out. Myself, I do not see any peculiar advantage in whole seed: I would as soon cut as not; and keeping the sets cool on a barn floor, by turning them over now and then, will prevent them from mildewing. This, of course, I speak of the main-crop on a large scale; our baskets of sprouted tubers can be cut in the field or garden just before planting.

As to the injury done by leaving too many eyes on each set, I may reason from the analogy of the damage done by leaving swedes, mangels, &c., too close together. The number of shoots starting from one or more plants on the same point must be limited, for if they become crowded, the crop will be less than the land is capable of producing. By limiting the growth we prevent crowding above ground, for where the tops are crowded, the tubers will not be crowded; a few strong vines, or haulms, with all their leaves exposed to air and light, are capable of supplying more vigour to the undergrowth than a larger number contending for the mastery with each other.

Preparation of the land.—Some people of high repute in the gardening world, among others Shirley Hibbard and Sutton, of Reading, the well known English seedsman, recommend either manuring in the fall, or planting the potato sets after some previous heavily manured crop. Mr. Hibbard grew his great crop of 800 bushels an acre after the latter fashion. But in this climate, where we find the ground so cold in spring, I should prefer applying the manure at that season, as thus: Having ploughed the land in autumn, as deep as the soil will allow it to be done with safety, I draw the grubber over it, along and across; harrow until the ground treads equally all over; draw out drills 2 feet apart; spread the dung, plant the sets 9 inches apart, and split the drills, passing the roller over them as a finishing operation.

I do not take the raw dung out of the yard, but prepare it before hand in this way: Three weeks before the probable planting time, I get together a good lot of mixed dung—cattle, horse, and pig,—which I throw up *lightly*, in a conical heap. In about ten days—more or less according to the weather—this will be found pretty hot, when I turn it over into a square flat-topped shape, and leave it till it is wanted. The outside should, in turning, be thrown into the middle. The dung when carted to the drills should be pretty warm, and the sets placed upon it will soon feel its genial influence. I should prefer drawing the dung to the field before the second turning if the state of the roads permitted, but so early in the season that is generally impossible.

My neighbour, M. Daignault, generally has the earliest new potatoes for sale of any farmer in this neighbourhood. He proceeds as follows: taking the sets from the cellar, he ploughs the land roughly; harrows it once or twice; spreads the dung on the flat surface; draws drills—and such drills!—plants the sets—3 feet between the drills and 6 inches in the drills—and splits the drills. The mess the piece is in after this work may be conceived! But that is nothing: when the potato-haulm begins to show above ground the weeds in the dung spring up with it, for the dung never having heated, but coming rough out of the yard, every seed is sound and ready to sprout. What follows? I dug potatoes on the 21st June; M. Daignault has no chance of getting any till the same day in July. (1) There can be no difference in the soil or

the exposure, as the two lots are only separated by a furrow!

What I have said about early potatoes applies, of course, to growing them on potato-soils. On heavy land we must necessarily manure the land in the fall, and the best way I think would be to plant the sets, after the ground has been well worked, in every third furrow of the common plough, the man holding as small a furrow as he can manage—say, 9 inches. This would give 27 inches between the rows, and the crop would be, I think, better and earlier than if planted in drills—I do not like drilling on heavy land for any root-crop.

After treatment.—As the principal object to be gained in planting early potatoes is *earliness*, the less they are disturbed the better. They must not be treated as a *cleaning-crop*, but “stand on their own bottom”; the turnips, or French-beans that succeed them can be hoed and grubbed as much as you please, but the potatoes must be let alone to bear their natural produce at their own time. And how about the weeds, if the potatoes are not to be harrowed two or three times, and horse hoed, and hand-hoed? Well, if your land has been properly farmed, and the dung has been properly heated—never mind what pure scientists tell you about the escape of ammonia; that is, bosh!—if the management has been correct, one harrowing, with the chain harrows, one deep horse-hoeing as soon as the tops appear above ground, and one light hand-hoeing, or properly “edge-hoeing,” will be enough, and the sooner these operations terminate, the earlier will the crop be. I never earth up anything; and, of course, I do not earth up early potatoes.

This year I put my potatoes in 40 inches apart, and planted scarlet-runners between the rows. Every body who passes wants to know “what those bright scarlet flowers are, where the potatoes grew?” The beans were kept pinched, and they promise to be ready for picking next week. Oh! for a shower, a good drenching shower!

The potato beetle.—Just as my potatoes were coming into flower—June 7th—I squashed about 100 pairs of old beetles that were in the act of procreation. They had laid a few eggs, and on the 27th June I Paris-greened the plants, since which time till to-day—July 24th—no beetles have appeared, and the haulm is as fresh and healthy as I ever saw it in a dripping season. (1) It is a thousand pities that most of our farmers— $\frac{9}{10}$ of them, at least—neglect the first appearance of the old beetles, and equally neglect to poison the last hatch. When the tubers have arrived at what is supposed to be their full growth, the Paris green pail is put by, no matter how many beetles are in egg on the under-side of the leaves, and they are left to furnish breeders for the next season. At this time, if they were picked or crushed—Paris-green nor London-purple would do any good, as the beetles no longer eat,—the brutes would eventually be universally expunged.

I have planted potatoes since I have been in Canada almost every year, from April 9th, and I have never had them injured by the frost. If I fancy frost is coming, I draw a little earth up to the tops, but as long as they are not through the ground I have no fear. My Early-roses are to-day—July 11th—quite mealy, in fact, nearly ripe.

As to the main crop, the process up to planting is about the same as for the earlier one, except the sprouting. Roll, and, when coming up, chain-harrow once or twice; horse-hoe as often as possible, particularly after rain has pounded the ground. Edge-hoe, the row being between the feet, and three strokes given at each step: one at each side, and a sharp stroke between the plants, from right to left and then from left to right. These latter strokes are important, as they loosen

(1) He began to *scrape out* some—July 27th. A. R. J. F.

(1) S raphin Gu vremon's crop at Sorel, whence I have just returned, is, at present, perfectly free from the beast. A. R. J. F.