

Ten bushels of dry hardwood ashes may take the place of the chloride of potash, and the superphosphate should be a plain combination of mineral phosphate of lime and sulphuric acid. Thus, the weight of the whole will be less than 28 lbs, and if you are curious in your researches, you can try a dose of 8 cwt. of common farmyard dung on another plot, and see what lessons the whole will teach you: they will be, generally speaking, the following:

1. By the comparison of nos. 1 and 6, proof will be afforded that 28 lbs of mixed artificial manures will produce as great, if not a greater crop, than 8 cwt. of farmyard dung.

2. On comparing nos. 1 and 5, it will be found that the suppression of a single substance, nitrogen, in the normal manure, will be sufficient to reduce very considerably the usefulness of the three others which constitute the manure.

3. In the general run of soils, particularly in the lighter ones, that nitrogen, used alone, produces a better crop than the minerals put together. If you look at the engraving of comparative yield of potatoes, taken from M. Ville's book on manures, you will perhaps better appreciate the halting description I have given.

I do not, however, advocate the principle of manuring land for potatoes with artificials alone. I leave that to M. Ville and other manufacturers of manures.

But adding certain quantities of chemicals and thereby to spread the dung of the farm over a larger surface is a safe practice. My dose for this crop would be .

	tons. cwt.
Dung.....	10 . "
Ashes 7
Plaster.....	. 2
Bones.....	4 bushels

The dung to be spread in the drills as usual, and the plaster dusted over the young plants soon after they are well up; the ashes and bones should be sown broadcast as early in the spring as possible, and well harrowed in, as potash in any form takes a long time before it goes to work.

Planting potatoes.—Potatoes are almost invariably planted after a white-straw crop. If cleaned from couch-grass and other root-weeds soon after harvest, so much the better. The autumn furrow should be as deep as the horses can manage to make it, and water furrowing must be attended to, for we must remember that this is the earliest root-crop to be planted in the spring.

Of late years, the grubber or cultivator has usurped the place of the plough in the early preparation of the land for potatoes. I still have a feeling in favour of cross-ploughing: I think it mixes the soil better, and if done when the land is in proper order, no ill effects will be felt from the operation. After the cross-ploughing, all work up to the time of drilling may be done with the grubber and harrows, and any weeds brought to the surface should be gathered and carted away.

Preparing the seed.—There has been a great deal of controversy of late years as to the mode of preparing sets for planting. Sets from large potatoes and sets from small ones; sets with one eye and sets with two or more eyes; sets of small whole potatoes, from whole middle-sized ones, and even from large whole potatoes, all have had their advocates. Last season by way of experiment, I tried sets with one eye only, and I am bound to confess that the crop was more than fair; but I cannot feel any confidence in the plan, though I should be puzzled to say why, probably my "old fogeyism" may have something to do with it, or the very small haulm that is thrown up from the one-eyed sets. The two finest crops I ever saw grown, one at Longleat, the Marquis of Bath's, of 640 bushels to the acre, and the other at Shirley Hibberd's of 800 bushels to the acre, were produced from sets called

"middlings" in the London market (uncut), which were about an inch and a half in diameter. The engraving annexed shows the ordinary way of cutting the potato for seed.

The state of the potatoes when taken out of the collar will



How a potato may be cut into sets.

depend upon the weather and on the state they were in when harvested. If the weather is mild and the cellar warm, the potatoes will probably have sprouted. If the shoots are long, they should be broken off at once, as there is no chance of their undergoing the process of cutting intact. The best state for them to be in is to have the germs just opening in the form of a bud: these will soon sprout after planting, and be some days earlier than the rest in forming tubers.

Sets for very early potatoes, either in the open air or for forcing, should be treated in the following manner: about the last week in March select middling-sized tubers and place them in shallow trays in a warmish room fully exposed to the light; the germs will begin to expand in a fortnight or so, and instead of being white, as in the cellar, they will be found to be of a fine greenish purple, short and stumpy; these should be planted at distances of say 20x9 inches apart, in very highly manured land, kept clean by shallow hoeing, but not earthed up at all. If set the last week in April, they should be fit for the table by the 18th of June—Waterloo day.

Forcing potatoes.—Not an expensive job at all where a good gardener is kept. Make a well shaken up bed of horse-dung, say two feet high, trodden down and made firm; eight or ten inches of earth will be enough, and the sets planted 18x7 inches. The frame should be a foot or fifteen inches deep, and, as a cover, matting laid over bent rods like a gipsy's cabane will keep the frost out and answer all purposes. The matting should be removed as soon as the morning frost is conquered by the sun.

Early sorts of potatoes.—For forcing, I know of but one kind that is worth a farthing—the *Ash-leaf kidney*.—The peculiar virtue of this tuber is that it is as good to eat when the size of a bean as the others are when ripe. The *Early-Rose* is gorgeously fine in August, by which time the *Ash-leaf* has matured and is past its best; but an unripe *Early-Rose* is hollow in the middle, soft, and pappy, while the immature *Ash-leaf* is in its most perfect state. So, I advise every one to plant enough *Ash-leaf* to last from the middle of June to the 1st August. I shall have no seed to spare this year, but next season I hope to have enough to distribute in small quantities to all my friends. There is a fair-sized early, or rather second-early potato, grown on the islands about Berthier, at Joliette, &c., called "*Ladies Fingers*." It is like the *Ash-leaf* in form but rather rounder; in colour, yellowish, whereas the *Ash-leaf* is white, and far inferior in flavour. Both kinds have very slight haulm, and will stand any amount of dung. Above all things bear in mind that earthing up will delay the formation of tubers, and that these very early potatoes are worthless when ripe; they are never *mealy*, but their flavour is perfect.

Continuing what I was saying about sets, I may remark that at Sorel it is the custom to plant small potatoes whole: not the tiniest of all, but the next-sized. As I remarked before, the practice is correct, but I wish the Sorel people would change their seed a little oftener. It is a much more important thing than they seem to fancy, and I know by experience that a judicious selection would make a difference of many bushels per acre in their crops. They need not go far,