THE VEGETABLE GARDEN.

Treatment of Farm-Yard Manure for Gardens.

Few subjects are of more importance to the garden ', or have led to the expression of more opposing views from different writers, both practical and sci One class recommend vehemently that may entilia. nure should be thoroughly rotted in the yard before putting it out on the land, and support their position by arguing that manure is not food for the plant until it is decomposed; also that, when manure is rotted, it requires less labor to haul and spread it, in consequence of the great duminution in its bulk. This latter argument can only count on the supposition that, a'though the bulk be so greatly dimmished, the virtue of the manure all remains, which is most certainly a mistake. Another party advocates put ting out the manure while quite fresh or "green,' and immediately spreading it on the land. Advo cates of both measures point triumph in ly to result as conclusive evidence that they are right. It is not to be denicil, of course, that a marked effect will follow either course alluded to, especially if sufficient manuro be applied; and yet both of these plans are greatly wrong, though partly right. It is quite true that manure is not food for the plant until it is de-composed or "rotted." But the fatal objection to composed or "rotted. That the latit objection to rotting in the yard is that, by so doing, we lose say one-half of a valuable commodity. On the other hand, it is true that putting out green manure puts all the constituent elements on the land; yet the following grave objections exist against the plan :--1. It does not increase the manure; 2. It does not improve the quality; 3. It seeds the land with weeds; 4. It does not save labor or time, and may cut the ground up objectionably. But, can a process be suggested which possesses all these advantager without the drawbacks? Yes, I am confident tha the following process will meet all objections, and will also increase the bulk of manure; will un prove the quality; will kill the weed seeds, without in creasing the labor; and will throw much of that work into seasons of the year which are not so pre-cious as that in which yards are usually emptied. The process is as follows:--On the ground where it is desired to have the manure, select an elevated po-tion rotting in the yard is that, by so doing, we lose say one-half of a valuable commodity. On the other is desired to have the manure, select an elevated position, and with the aid of the pickaxe and shovel, shifting, and with the aid of the pickaxe and shovel, make a long, shallow trench, say 6 or 7 inches deep, and 2 or 3 feet wide; throw the earth out on the upper side of the trench. This trench may be made at any time, but one must always be prepared just before winter, say in the early part of November. Next, in cleaning the stables, always shovel imme-diately into the cart of lower to a ways a shovel immediately into the cart or waggon and haul at once to the trench, where it may be dropped in a manner most convenient for covering. Then cover the ma-nure as soon as possible with earth taken from either side of the trench, until the manure is covered with twice its bulk of earth. The drier the earth and the more pulverized the better. Let the earth cover all the manure as effectually as possible, to arrest the gases arising from the decomposing manure. In this state it may stand as long as desired without loss, if the weeds are not allowed to grow on top of it. A month before using it should be examined, and if not thoroughly rotted, the heap should be lightened up and stirred, to admit air and moisture. When ready for use, the manure has almost disappeared, and the earth having absorbed all the gases evolved in the act of decomposition, has become manure. But, in-asmuch as we doubled the bulk of earth to the manure, we have twice as much manure as we had, and moreover we have two loads on the high part of the ground for the hauling of one, thus lessening greatly the labor of drawing to the garden. Hence it fol-lows that this process pays best where you have to haal farthest and lughest; the spreading, being downhill, is easier.

The main principle of this process is the well known quality which earth possesses of "fixing" gases. The earth retains these gases, which are the vital fertilizing properties, until the plant root comes vital fertilizing properties, until the plant root comes in contact with it. This fertilizing earth is very durable, as "nothing is lost," indeed, jits effects have been plainly visible on the spot where it had been spread years and years before. By this process 1 conceive that every possible objection in the treat-ment of manure is obviated, every leak stopped, and every advantage gained. When the compost is the under the wood seeds must every advantage gained. When the compost is thoroughly "cooked" or rotted, the weed seeds must be killed, and the manure is fit food for the plant. It is a manure fit for any or all crops. For digging under and top-dressing, we have the high authority of the late Prof. Johnston for saying, that when a compost is made of more than one constituent, the mass is equal or superior to its best part. From this it would follow that t' e whole of the compost heap

Planting Horse-Radish.

If we look through our markets and see the chunky stuff sold for horse-radish, it is clear that not one in a hundred know how to grow it. Horse radish well-grown is as prolitable as any garden crop, but we think there is not much profit in the scrubby stuff referred to.

To have good horse-radish, a rather heavy soil should be chosen, but by no means wet, though one which gardeners would call damp and cool will be by no means objected to. It cannot very well be made too rich, and if even trenching the gound is to find favor it will surely be in favor with this crop. Most of our readers know what gardeners call treaching ; if not, the more agricultural term of sub-soling will give a good idea.

Now the object in raising good horse radish is to have long, clean, straight roots, and good culture is to get these. In raising horse-radish, every piece of the root which has a little of the crown grows. Generally pieces an inch or so long are set just beneath the soil, and one or more buds start up to beneath the soil, and one or more buils start up to make crown's with leaves, and others go down to make a root or roots. These are then forky or twisted and give the wretched roots we see. The proper way is to make holes with a dibble, post-spad, or crowbar, so as to let the small pieces which are to make plants go down a foot or more. Then fill in the holes and wait. The result is that in a couple of months a sprout will start upwards to the surface, and this sprout will start upwards to the surface, and this sprout in time becomes the straight, clean root we have spoken about. The second season after planting they will be in marketable condition, and should be all taken up and marketed that season and should be all taken up and marketed that season and a new plantation made in like manner on the same ground. From the pieces left in the ground by the ligging of the old roots many will come up, and these are generally relied on to form the succeeding crop; but these sprouts should be heed off as they come and be regarded as nothing but weeds, which everything that comes up where it is not wanted is. In setting out the rows must be made about eighteen or twenty inches apart, and the pieces to form roots be planted about four or sur inches apart. The distance, however, between the rows is to be

The distance, however, between the rows is to be regulated by the method of culture. Where the plough is used to clear out between the rows, they must be wider than when grown as a garden e-op. The richness of the ground will also regulate the dis-tauce to put the sets apart The richer the ground the closer the sets may be put.

If these simple hints are followed, one need never be without a good relish for fish, roast beef, or any of the multitudinous dishes where a little pungency is not to be despised .- Germantown Telegraph.

Cabbage Culture.

The Premium Flat Dutch, when true to name, is The Fremum Flat Dutch, when true to name, is one of the most reliable kinds of cabbage for field culture. Sow the seed in rich garden soil, in rows twelve inches apart, about the first of May. Seed sown at this date will give sizeable plants by the middle of June. They may be set out at any time from then until the first week in July, at distances 2½ feet between, and 2 feet apart in the rows. Like 24 rect between, and 2 feet apart in the rows. Like onions, cabbage can only be made to pay when grown on strong, deep and rich ground. Sixty to seventy two-horse loads of barn-yard manure to the acre is none too much for cabbages. Five acres of this crop or of onions are, however, by far too much for a be-gumer to undertake. It would be much better policy to start with say half an acre of each the first user to start with say half an acre of each the first year. and learn the details of the business from experience. It seldom turns out otherwise than in loss and disappointment, when so much is attempted on the start by inexperienced persons. Heavy losses the first year always dishearten the novice.—New York Tribune.

To Grow Large Melons.

When a melon gets as large as a cucumber take a large needle and pass a yarn thread (perhaps sev-eral the us twisted together will be best) through will come near the top of the stem. Now place the lower portion of the thread in a bottle and fill with water. The melon will soon drink up the water, when more should be added. It is said that they will thus consume a quart or more per day, and will eventually grow to an enormous size. They will not, however, possess the sweetness of those grown in the natural way.

I have never tested the foregoing, but my source of information is such that I placefull reliance in the plan. Perhaps by sweetening the water and adding some is at least as good as the best ingredient which came out of the stable, and that the quality of the whole is improved.—*Cullivator*. Berhaps by sweetening the water and adding some spices, any desired flavor could be imparted. Who will test the matter by experiment ?—*Bryan Tyson*,

Raising Tomato Plants.

BY J. B. ROOT, ROCKFORD, JLL.

Late in February we make our first sowing, and repeat it every week or ten days to keep sp a suc-cession and provide against accidents. For this pur-pose use light boxes filled nearly full of compost which can be easily lifted in and out. The cheapest are second-hand boxes from grocery stores, which can be split after the cover is m.led on and made into two. At this season of the year the bed must be a deep one, with abundance of heat, and the plants will then put in an early appearance and plants will then put in an early appearance, and should remain in the same boxes until they touch each other between the rows if the rows are an inch apart. They are then transplanted into other $b_{\pi}cs$ an inch apart cach way. Cases in which oysters in the can have been shipped, split into two, are cheap and very convenient, and thirteen usually fit neatly into a frame 12 by 54. Here they are a lowed to re-main until they again touch and crowd.

For their next receptacle we provide quart system cans cut into two. This makes of each can two neat, stout in boxes three inches deep, two wide, and three long; and these are convenient for so many uses in plant growing, that it may be worth while to describe how they are exsist cut and fitted for use. To hold them while being cut, make and screw to the work bench a stout frame or box just large enough to hold a can on its broadside, together with enough to hold a can on its broadside, together with a wedge to tighten it. Saw-cuts directly opposite cach other should be made in the box. Placing a short stiff-backed saw in these cuts, a few quick strokes answer to cut the can in two. Of course the siw dulls quickly, but cuts well even if dull, and can be quickly touched up with a file and kept sharp enough. Fitting each half-can over a piece of hard wood of the right size, two or three quick strokes serve to make holes an inch square in the bottoms, if they have not already been made. The jacced if they have not already been made. The jagged edges are then hammered smooth, and a pine chip coges are then nammered smooth, and a pine chip covering the entire bottom, and yet not fitting tightly, is put in. This serves a double purpose; it secures drainage, without which a plant will not flourish, and also serves as a means to remove the plant un-disturbed from the can when wanted. Into these half cans filled with rich compost the

p'ants are then removed with as much dirt as can be easily lifted with them. If the cans are then allowed to stand a few minutes in an inch of water, and the bed for a day or two is protected with lath screens, the plant scarcely stops growth, and scon fills the can with a perfect mass of roots.

When ready for sale they are placed for a couple of days several inches apart on boards in some place

of days several inches apart on boards in some place where the air circulates freely, and are thus hardened. In these cans, if occasionally watered, they receive no injury if exposed for sale on the stands for days together. Carried into the garden they can be set out undisturbed, and without injury to the can, by giving a steady pressure against the chip from helow, by which the plant, roots, and soil altogether are taken out undisturbed. One hardly realizes how nicely this is do: e until he has tried it.—American Aggiculturiat. Agriculturist.

STICKING PEAS .- A correspondent of the London Field makes a suggestion as to sticking peas, which is worthy of trial. He thinks that "to those who have to procure stakes at a great cost, the following method will prove advantageous, being very cheap, simple, and easily performed. A few rough stakes should be obtained and driven into the ground on cach side of the row about twelve feet apart. Trese stakes should be of a corresponding height to that of the peas, and when the required number for a line is inserted, some tar twine or other strong cord may be tied to the end stake, and passed along the line of stakes, making a turn on each within a few inches of the ground, and as growth progresses, raise the next the ground, and as growth progresses, raise the next turn a little higher, advancing in succession, until the plants attain their full height. These lines being run on at the right time, the tendrils of the peas will clasp firmly round them and support the plants quite equal to the well-known plan of aticking. Some imagine an advantage to be obtained in this way of training, as the lines get a better circulation of air, and pods can be gathered at all times without injuring the haulm."

THE fondness of John Bull for cucumbers is something remarkable, and he has carried the cultivation thing remarkable, and he has carried the cultivation of the vegetable to a high degree of perfection. Finit of chormous size is produced, some varieties being from three to four feet in length. An "eminent-cucumber grower" last year raised 107 encumbers of the "Duke of Edinburgh" variety, the aggiegate length of which was 284 feet, or an average of 32 inches each. The longest specimen measured 40 inches.