



The Field.

Turnip Cultivation.

THE introduction of the Turnip into the ordinary rotation of field crops marked a new era in the history of agriculture. "Had the turnip," says Mr. J. C. Morton, "continued to be what it originally was—a mere garden plant cultivated only for culinary purposes—it is no exaggeration to say that Britain would not have occupied the high position she now enjoys among the nations of the earth, whether as regards agriculture or commerce."

The turnip rejoices in a dropping summer, and a moist, warm, dark autumn. Its earlier development depends on the soil and a judicious use of manure. Afterwards, its nourishment is largely drawn from the atmosphere by means of its broad spreading leaves. Probably the largest crops are obtained by means of small doses of concentrated manures—ammoniacal or composed of phosphates—which exert a powerful influence on the crop during the earlier stages of its growth. The more minutely pulverized are the particles of the manures, the more rapid and shortlived is the action on the young plant, so that under some circumstances it is advisable to supply bones—for example—in a half inch form, in order that the crop may be saved from mildew and premature ripening by being too rapidly forced.

On account of the absorption of ammonia and carbonic acid from the atmosphere by the leaves of the turnip, it is a great enricher of the soil, while its deeply penetrating roots draw up nourishment from sources quite beyond the reach of cereal crops. The air above as well as the subsoil beneath are thus made to furnish food to the crop; and under a proper system of husbandry, where the roots are consumed by stock under favorable conditions, the fertilizing properties gathered and concentrated in the turnip are restored to the surface soil in the form of farm-yard manure. Like all bulbous rooted plants, the turnip grows with most vigour in a free, rich soil. Unquestionably, turnips should be sown in drills from 28 to 30 inches apart. If the land is dunged in the autumn these should be formed shallow, for if the drills are raised to a sharp angle the auxiliary manures to be applied, get too deeply buried.

When turnip land is ploughed in spring preparatory to sowing it, is a good plan to cross-plough twice, the second furrow leaving the land comparatively loose, and in a favourable condition for drilling and sowing. If the drills are to be



formed across the line of the ridges it is the custom of the best "old country" farmers to make the furrow preparatory to the drilling, along the line of the old furrows.

Whenever it is practicable, farmers should manufacture their super-phosphate at home. The following process is furnished to an eastern exchange by a correspondent:—"Firstly—pound the bones to a coarse powder with a hammer, then put them into a boiler with a little water and steam them for half an hour, remove the bones to a half barrel or other convenient vessel. If the sulphuric acid is of full strength take of it half the weight of the *dry* bones you are about to dissolve, and add to it one third of its bulk of water, pour this mixture on the bones, and in about a week, with daily stirring, they will be reduced to a paste. I then put all the hen manure I have on an earthen floor, and pour on it the dissolved bones reduced with its own bulk of water, and mix the whole thoroughly, then add a barrel of charcoal dust or dry peat to every twenty pounds of bones, again mix, make the lot into a snug heap; in a few days, work it over and again let it heat, repeating the working and heating till the whole becomes a dry powder that you can sow broadcast, or feed from a drill machine.

Last year with the bones from the house and the manure from twelve hens, I made eight barrels of super-phosphate that proved itself superior to Coe's wherever tried, particularly in the garden and on corn.

The cost was almost nominal:—

Sulphuric acid, 20 lbs.....	\$1 00
Labour and horses, say.....	1 00
Half barrel spoiled.....	0 50
	\$2 50

8 bbls. superphosphate, 150 lbs. each—1200 lbs., at Coe's price, 2 cts. per lb.....\$24 00"

SWEDEN TURNIPS contain less water in their composition than the common field turnip. They grow more slowly, require better land in higher condition, and are better able to resist severe frosts. Less water is contained in their composition, and they are consequently more nutritious than common turnips. As a rule, the produce of swedes per acre is less than the common varieties, but their nutritive qualities are at least thirty per cent greater. There are several fine varieties of the swede none of which perhaps are superior to "Sharpe's Improved," as shown in our illustration. It attains great size, is rich in nutritive qualities, and is unexceptionable in flavour.

