varieties have been principally obtained from the continent.

Soil and Peculiarities.—The two great properties, says Mr. Raynbird, which recommend the Beet as a field crop, are, that it will succeed upon soils too heavy and retentive for the turnip; and that its earlier maturity, and the absolute necessity of its early removal from the soil, to be stored for use, render it a better preparation than the turnip upon those soils for the following grain crop. "Another recommendation is, that it improves by storing, and that it does not come to its full perfection for feeding until late in the season. When turnips and swedes are either consumed or become unpalatable, and almost useless for fatting cattle, the Beet root has arrived at its greatest perfection; and it may then be used with great advantage, as well as safety, for fatting animals. Early in the season it seldom forms a large proportion of cattle food. Some of the most experienced graziers in the eastern counties use white turnips till Christmas, then Swedes till February or March, keeping the Mangold Wurzel in reserve for feeding in March, April, or May; and, indeed, we have ourselves frequently reserved Mangold for beasts as late in the season as July. In the spring, our fatting sheep have Mangold cut for them when feeding off clover and rye-grass, and the box fed beasts have a supply in the same manner, in addition to grass, clover, or tares, which are daily brought to them from the field."

"The neighborhood of the sea being the natural habitat of a wild variety of this plant, and chemical analysis having proved the existence of a large proportion of common salt in the mineral substance of the ash of Beet root, (frequently a fourth,) are reasons that indicate the cause of its greater luxuriance in maritime situations, and which plainly tell the farmer upon the sea-coast, that he may with some confidence give this root a trial if he has hitherto neglected to do so; for it is upon the alluvial soils, rich in organic matter, that the heaviest crops of Beet root are grown."

This crop appears to be well adapted for culture on farms whose heavy clay soils render them less productive in turnips than what is, for other purposes, regarded as light inferior land. It, therefore, especially concerns the farmers of heavy soils, being more suitable for these than any other tuber whatever,—all the turnips, carrots, and even potatoes, flourishing best on light soils. It is this fact indeed upon which partly depends the distinctive value of this crop, and a reference to it serves to illustrate the position we stated in our introductory remarks. For although it be quite true as a matter of agricultural economy that wheat should be grown as much as possible in preference to every less profitable crop upon wheat soil, still such a crop as Beet (apart from the value it returns in cattle) is essentially necessary for working economically a judicious rotation, and thus developing in wheat, the golden riches of a wheat soil.

Preparation of the Soil.—Beet land requires a preparation of fallowing and drilling, somewhat similar to that required for the turnip; in fact the system of Beet culture recommended by most agriculturists does not differ essentially from what is usually considered good turnip husbandry; and where the means usually successful in producing a good crop of turnips, fails in the production of an equal crop of Beet, Mr. Raynbird is of opinion that it may be justly inferred that the soil or climate is unfavorable to the growth of the latter. In the case of the Beet it is even more necessary than in the case of turnips, that the preparation of the land should begin in autumn, especially where heavy soil is chosen for the crop; upon stiff soils more dependence should be placed upon the frost and rains of winter for a finely pulverized seed-bed than upon spring cultivation. If farmyard manure is employed, it ought of course to be ploughed in Autumn.

Manurial Applications.—Some writers, adopting spring preparation on light soil, recommend a broadcast sowing of 1 or 2 cwt. of guano or superphosphate of lime immediately previous to splitting the drills upon the dung, while others are contented with a good application of ordinary manure supplemented by steeping the seeds for 48 hours in urinary water, sudds or lees, and drying with quick lime—a process which is said to hasten the decomposition of the albumen of the seed, and thus give vigor to the young plant by a free supply of food.

There can be no coubt, however, that guano and chemical manures have a powerful action upon Beet, which partakes in a great measure of the habits of other Chenopodiaceæ, required gross feeding. For example the best spinage we ever saw was grown by continual applications of gas water; the common goose foot is one of the few plants that really luxuriate on the dung-hill.

Sowing of the Seed and Summer Culture.—The land being prepared as above directed, the seed is to be sown in the quantity of 4lbs. to an acre. The seed being larger, ought to be covered rather deeper than that of the turnip. The crop must be horse and hand hoed in a careful manner, very much in the way of turnips, the plants being at the same time singled out to a distance of twelve or eighteen inches, more or less, according to the nature of the soil and consequent size of root that may be expected.

During the summer, horse and hand-hoeing must be repeated at intervals, and all weeds carefully removed. It is not recommended to earth up the drills, because it is found that the tap-root develops itself better and cleaner from lateral fibres when this process is not adopted.

Cobbett has given some observations regarding the garden culture of Beet that merit reproduction here as suggestive of some points in the management of the field crop. He says "to have fine Beets, the ground should be dug very deeply, and made very fine. There ought to be no clods in it, especially for the tap-rooted Beets, for clods turn aside the tap root and spoil the shape of the Beet.—No fresh dung by any means, for that causes side shoots to go out in search of it, and thereby makes the root forked instead of straight; and, as in the case of carrots, a forked root is never considered to be a good one. * * Beets may be transplanted, and will in that way get to a very good size, but they are apt to be forked."

Capabilities of the Crop for Dairy Purposes, and its Influence on the Production of Milk.—The Beet root is of extensive utility for farm and other purposes. Recently it has been very warmly recommended to the attention of the dairymen, as not only affording an excellent food for milch cows throughout the winter, and much superior to turnips during the spring and early summer, but on account of its beneficial effects in greatly increasing the quantity of milk. It has been objected that when cows are too exclusively fed upon Beet the milk is watery and thin, but it has not been shown that in the ordinary methods of feeding, even when large quantities of Beet are given, any great deterioration arises. There can be no doubt, however, that when cows are fed largely upon the *leaves* of Beet, as was the custom to a great extent for many years, the milk became watery, and deficient in cream; but no experienced farmer recommends that practice at the present time either with a view to increased produce or profitable feeding, for the cutting of the leaves greatly deteriorates the root, both in absolute size and nutritive quality. The effects of the Beet root as cow feed appear beneficial from the experiments of Boussingault, the great chemical farmer of Beechebronne.

As Food for Pigs and Sheep.—While its value as a dairy plant has chiefly drawn attention to this crop, that characteristic must not be allowed to eclipse its other points of importance in farm economy. Donaldson tells us that in a raw state there is no better food for store pigs and young cattle, and a practical authority to whom we have referred for information states that in the case of the garden Beet, which he has used as pig-food, the animals relish it better than almost any