

tion contained in a pamphlet by Judge Peters, of Prince Edward Island, a colony in which much attention has been bestowed on this branch of husbandry.

*The Turnip—best varieties and sowing.* No fewer than forty-six varieties of the turnip are enumerated, of which, however, only a few deserve the attention of the farmer. The *Swedish*, of which the purple-top is the best variety, is most important for a principal crop, as it is less injured than others by the fly and caterpillar, keeps better in winter, and yields a very large crop. Thirty to thirty-five tons per acre are considered a good crop in Britain. The *yellow bullock* or *Aberdeen yellow* and the *yellow tankard* rank next for winter keeping. The crop is smaller than that of Swedish, and the roots do not keep so long. These turnips, however, require less time to grow, and may therefore, be sown much later than the Swedes. The *white* and *red globe* are of large size and grow rapidly, and are as nutritive as Swedes in autumn and early winter, but become soft and of little value toward spring. It is the best policy to sow Swedes largely, and to have a proportion of the others for feeding in early winter. They also serve to fill up gaps caused by the depredations of the fly in the rows of Swedes.

Long or fresh stable manure does not suit turnips. They thrive better with short manure, compost, door cleanings, coal or wood ashes, bone dust, guano, or mixtures of these, and in addition to the manure ploughed in, a little wood ashes or guano sown along the tops of the drills with the seed is of great value in giving a vigorous start. The following directions from Judge Peters, give the best colonial practice that we know in preparing the ground and sowing:—

“Turnips are generally sown in that part of the rotation which closes one course and commences another; and in this island it will in general be found convenient to sow them after oats sown on ley. On new-burnt lands there are few weeds, and excellent crops may be raised with little labour, by merely scattering the seed and hoeing it in; but with this exception, they should always be sown in drills, under which system three acres can be cultivated with less labor than one acre broad cast. The land intended for them should be well and deeply ploughed in autumn, and cross ploughed in spring, then harrowed and rolled to break the lumps. If the land is foul with couch, have it well cleaned, or the turnip crop will be a failure, or cost more to keep clean than would have cleaned the land before they were sown.

Next open the drills: thirty inches apart is the best distance for ordinary culture, as it gives room for the plough and horse hoe to work freely between the drills without injuring the plants. If a prize is wanted, perhaps twenty-seven inches will give a somewhat larger yield, but they will be more troublesome to clean; and I am convinced that farmers, generally, will find thirty inches between the most convenient distance. When the drills are opened, then cart in your manure, which should be short, and make it in small piles, so that it can be regularly spread in the drills; by making the piles so that they will spread into the three drills in which the horse walks and the cart wheels run, you will spread it more evenly, and with less labor, than from larger piles, in which I often see it deposited. As soon as the manure is spread in the drills, and before the sun can dry it, split the drills with the plough, which will cover the manure and make a ridgelet over it, then run a light roller length ways along the drills, so as to flatten them on the top, and drill in the seed at once; it is very important that it should be done as soon as the drills are raised, for the ground is then fresh and damp: whereas, if you leave it, the tops of the drills get dry, and the seed is longer coming up, and the plants grow more slowly. I frequently see persons waiting for days, until the whole of the land is prepared, before they sow. This is a very bad practice, because, not only do the drills become dry, but the weeds begin to shoot before the seed is sown; and when the plant comes up, it finds the weeds up before it, and is consequently smothered, and is much more difficult to hoe and clean. The least you can do for the turnip is to give it fair play, and a fair start with its numerous weedy competitors; and, therefore, make it a rule to sow in the evening, or, at furthest, the next morning, every drill that has been dunged and covered during the day.

“Some spread the manure broadcast, and plough it in with the second ploughing, and raise fair crops; but by putting it in the drills, the whole strength of the manure is given to the roots of the turnip, and therefore, must promote its early growth more than when spread over a large space of ground. When the manure is ploughed in broadcast, I think it should be done in the fall; a method which seems to produce excellent crops, and saves labor in the spring, when time is of most value to the farmer.”

The fly will usually be prevented from destroying the crop by the following precautions: 1. Sow not less than three or four pounds of seed to the acre. This will give enough both for fly and farmer, and will enable you in thinning to select the strongest plants. 2. Sow not earlier than the 1st of June. 3. Sow as you prepare the ground, before the seed furrow is dried up,

and if possible immediately before rain. 4. A little guano scattered over the drills is very useful, and if some seed of the white turnip be sown over the ground, it will attract the flies from the swedes. 5. If notwithstanding these precautions gaps are made in the rows, sow in them white turnips or have a seed bed of the yellow globe man-gold wurtzel, and plant them out in the gaps. They will grow and thrive even in dry weather. 6. The last resort is a second sowing, but with the above precautions this will seldom be necessary.

*The carrot, its varieties manures, &c.*—The culture of this root is usually pursued on a small scale only, but its high nutritive power, its certainty and good keeping properties, as well as the large crops that it yields, make it deserving of more extended culture wherever there are deep and light soils, or they can be deepened by ploughing or subsoiling. The safest and most productive varieties are the long orange, red Alfringham and white Belgian. On the culture of the carrot, Judge Peters remarks:

“Carrots do not require the land to be so rich, but they want it very fine and deep. They seem to succeed best after potatoes; probably because the ground is then light and friable. After the land is cross ploughed, harrowed and rolled in the spring, it should be thrown into ridgelets, making them as high as you can, so as to give the plant as great a depth of the soil to grow in as possible; eighteen inches is width enough between the drills, but unless the land is very clean, thirty inches will be found the most convenient distance. Roll the drills, and drill the seed, while the earth is fresh and moist, in the same way as turnips. If you sow imported seed, you will require four or five pounds to the acre, and then not be sure of the crop; but if home raised seed is used, one and a half pounds per acre will be sufficient, as almost every seed grows; at least I have found it so. *Eight or ten days before sowing, I mix the seed with fine sand, carefully sifted so that no stones or lumps are left to choke the drill, and keep it moistened with water in a warm room, stirring it up every day.* When about to sow, I spread it in the sun for an hour or two, to dry, taking care not to dry it too much, which would injure the seed. I then place a gauge, large enough to let a large buck-shot through, in my turnip drill (one of Birnie's), and drill the seed in the same manner as turnips. Seed thus treated is generally up in three or four days, and the plants have a fair start with the weeds. They should be sown in May, or early in June.”

Carrots require the same manures with turnips. They have few enemies, and may