the Swedish turnip in its economical value to the farmer, and being less liable to depredations by insects, its culture is more certain. It has the property of retaining its nutritive qualities for a great length of time when properly preserved; and is an excellent root in spring for cows and young stock, and even for sheep in smaller quantity. Indeed, during the lambing season, mangel-wurzel, owing to the great juiciness of its root and the large amount of saccharine matter it contains, is superior to the Swedish turnip; milk, and not fat, being then required by the ewe for the nourishment of her young. Beet, like cabbage, seems better adapted to the heavier soils than turnips, but the mode of preparation and treatment is very similar. The rows should be at least two feet apart, and the plants set out 12 to 15 inches asunder. On rich soils and in growing seasons these distances would be too small. Frequent culture by horse and hand is required through the period of growth. Earthing up of the plants by means of the double mould-board plough as formerly practised, is not now approved. It has been found in all tap roots rising above the surface of the ground, that earth laid against them causes the growth of lateral fibres, which occasions a bitter taste and deteriorates the nutritive qualities of the root.

3. Carrots.—This plant is richly deserving cultivation by every man that has only a few acres of ground. The white Belgian variety is recommended for field culture, the tops and roots being much larger than the Orange and Altringham kinds; and on good land under proper cultivation will yield upwards of 20 tons per acre. It is of essential importance in cultivating carrots and other long, fusiform roots, that the soil should be deeply ploughed; in fact it ought be subsoiled to the depth at least of sixteen inches. This operation should be done in the fall, when the dung should be well incorporated with the soil; since with the carrot it has been found, that if the manure in a fresh state come into contact with the root of the plant, a large growth of lateral fibres and a profusion of leaves are sure to be produced. Carrots delight to grow in deep, warm, light loams, resting on a dry and porous subsoil. As the plant is not of very quick growth, it requires to be sown as early as the season and the state of the land will admit. Drills 18 or 20 inches wide will be found sufficient to admit a light horse-hoe; and as soon as the plants are about three inches high, they should be thinned out by hand to the distance of six inches from each other. Carrots are adapted to all kinds of live stock; they are excellent for horses, particularly in early spring before any green forage is ready; they are found to promote a healthy state of the blood and animal system: and horses having had carrots frequently mixed with their dry food, have seldom been known to go broken winded.

4. Parsnips.—What has been said of the cultivation of the carrot, will also apply to the parsnip. The latter, perhaps, will flourish better on a stronger soil than the former; but in either case the ground must be deeply pulverised, and kept clear of weeds. The highly saccharine juice of parsnips renders them very nutritious for all kinds of animals: some exceptions have been urged with regard to horses, but, we think, without any sufficient evidence. For pigs and milch cows they are excellent, giving to the flesh of the former a white colour and fine taste, and to the milk of the latter a peculiar richness, free from any unpleasant flavour, and yielding abundance of the finest butter. It is of importance to observe, that with parsnips in particular, none but *new* seed should be sown, since it frequently happens that old seed will not vegetate. This is one among the many causes of failure in root culture.

Cabbage.—There are a great many varieties of the genus *Brassica*, but only two or three have been considered adapted to field culture. As the cabbage cannot be so conveniently stored away and preserved as turnips, carrots, potatoes, &c., its cultivation for cattle in a climate like that of Canada must necessarily continue very restricted. Notwithstanding, a small plot of land, well managed, in cabbage, will always be found useful, and may be made remunerative. The best kinds suited to field cultivation, are the large Scottish or Yorkshire, the drumhead, and a variety called the American. These produce large leaves, which in the course of growth collapse, and form an immense dense head. A very hardy variety is cultivated in Germany and the north of Europe, called Kohl-rabi, which, while it produces a root like a turnip, sends forth a large number of stems, bearing leaves like a cabbage. Although the root is far less nutritious than the Swedish turnip, yet, as the plant will resist severe frosts, and bear storing much better than the common cabbage, its cultivation in Canada is well worth a fair trial. All the hardier varieties of the cabbage family, flourish best in soils abounding in clay; but then the ground must be deeply cultivated and well prepared and manured to ensure a heavy crop. Care should be taken to allow sufficient room for the growth of the larger kinds of cabbage; the drills should be from 3 to 3½ feet apart, and the plants 2½ feet asunder: we have seen soils in which these distances might, in favourable seasons, be beneficially increased. The frequent working of the ground, particularly in dry weather, is one of the principal secrets of success, not only in cultivating cabbages, but all kinds of root crops.

6. Vetches.—*Vicia sativa*, or the common tare,