

method is to manure the ground in the fall, and plough it carefully down; then, as soon as the ground is in a fit state to work, we go over it with a cultivator, making a fine, mellow seed bed, and then sow the tares at the rate of about two bushels per acre. Where the crop is sown for soiling alone it is well to sow about half a bushel of oats mixed with the tares; the oats will, in a measure, prevent the tares from lodging, and will consequently keep them from dust, and other impurities; as, when the season is damp, the tares are apt to lie down and mildew. In that case, stock do not eat them so well. A top-dressing of plaster, when the plants begin to make their appearance above ground, will promote an early growth. If any of the tares are intended to ripen for seed, the plaster had better be omitted, as on such soils they grow too much to straw (if plastered) for ripening their seed well.

If wanted in large quantities for soiling, they should be sown at intervals of from ten days to a fortnight, so that they may be fed to stock when they are in their greatest perfection,—that is, from the time the blossoms begin to appear till the seed is fully formed.

The principal purpose we grow them for is to feed to working horses at noon during the working season of summer-fallowing, or while working them in mowing and reaping machines, drawing grain, or other kind of work during the busy season, when they have not time to fill themselves on our usually short summer pastures; we have no doubt that farmers generally would find it to their advantage to grow a small quantity every year, for such purposes. Tares seem to grow as well here as in Great Britain; the principal difference that we see is, that here, in most cases, they will cut only once, there they will cut twice; should the season be a wet one here they may cut a second time, but rarely. To show how much they are esteemed as a feeding crop we make the following extract from Morton's *Cyclopædia of Agriculture*:—"Sheep fatten faster upon green vetches, than on any other herb vze, which occasions its constant use by ram-breeders. Horses improve more rapidly upon it than on clover or grasses. Horned cattle thrive surprisingly upon this fodder. Cows yield more butter from the tare than any other provender; and pigs voraciously consume and prosper on it without farinaceous food." Another writer states: "that an acre of good vetches, sown in the yard or stables will keep more horses than six acres of the best pasturage; they succeed best in a wet season. A good smothering crop of vetches, cut before they go to seed is nearly as good to precede a wheat crop as a summer fallow." Mr. Lawe's experiments on tares extending over many years, prove that, like peas and beans and clover, vetches are an improving, rather than an impoverishing crop. To show the extent to which they are grown, we

may state that there were estimated in England in 1854, to be 214,551 acres in tares. In Scotland in 1857 the returns gave 18,418 acres in tares, and in Ireland, in 1859, the returns gave 33,207 acres in vetches and rape, as they are combined in the returns from Ireland. We have no idea of the quantity grown in Canada, as there is no notice of them in the census at present being taken.

It is prudent to raise sufficient seed for another year; but a crop of seed tares raised for sale is seldom very profitable, as some years, when they are a good crop for feed, they produce very little seed, being very uncertain in that respect; then the price varies much, and there is seldom much demand for them in Canada. When grown in Britain, expressly for seed, they are frequently mixed with horse beans,—to afford them support for climbing; the proportion the beans should bear to the tares is as one to four by measure, the tares grown by this method are said to ripen better and make a finer sample of seed. We have tried this method once here, and they ripened a week earlier than those that were sown without the bean. Tares thrive best on heavy soil, but will grow on any land if well manured.

W. R.

Cobourg, April, 1861.

### Cultivators.

EDITORS OF THE AGRICULTURIST.—In the last No. of the *Agriculturist*, 16th March, I see over the signature of "Caledon," an enquiry for a two-horse cultivator, simple in construction, that a blacksmith could mend in case of accident, and at such a price that a person having a hundred acre farm could afford to buy. As to the two first points, I am quite sure I could suit your correspondent, but in the latter, he could best judge after a trial of one of my cultivators. I will endeavor to give you and your readers a short description of the cultivators I manufacture: in the first place, the iron is all wrought,—the teeth or blades are laid with steel, and can, when required, be sharpened, or the steel renewed by any good blacksmith. They can be set to cultivate from one to ten inches deep, and are intended to be used with the hind wheels of a common lumber or spring wagon or cart, horse-rake wheels, or wheels furnished with it if ordered. Two horses can work it from three to six inches deep in spring on ground that has been fall-plowed, (or on stubble ground,) about as easy as they can plow the same ground. The teeth or blades being long, they are not liable to clog with the stubble or long manure. By a lever across the axle, with the front end attached to the cultivator, by a short chain, the driver can, without stopping the team, raise the cultivator to clear the ground 8 or ten inches, so that any sods or other obstruction that might hang to the