

MR. JAMES CASS' ANSWERS.

- To 1, 2, and 3 no answers returned.
4. I sow oats first, then plant it with corn or potatoes, next sow wheat, then seed down with oats which makes the fourth year.
5. I have no loamy soil.
6. I sow pease first, then pass the fire over it, and sow wheat, and lastly seed down with oats,
7. Twenty-five bushels.
8. I sow turnips and beets; 2lbs per acre of each. Yellow swedish turnips and sugar beets. The beet I consider superior to any other roots we now raise.
9. If early, I sow Black Sea wheat about the 15th of April; and, if late, about the 20th May; potatoes I plant the first of May; corn, 10th May; oats about the 20th April; pease and barley the same time.
10. I do not.
11. I do not. Lime I use about 20 bushels per acre. I use manure by itself in the spring, well fermented. I use muck in the fall, applied by itself, and also for compost.
- 12.—I have use unleached ashes by themselves at the rate of 20 bushels per acre on clay soil; every bushel applied on corn I value at the rate of 5s; I apply it after the first hoeing.
13. I keep it under cover, free from rains.
14. I would especially recommend farmers to raise more of the root kind in general, and to make more compost manure for the top-coating of meadows.
15. I have. First, let it be well drained, then pass the fire over it, plough it, and in the spring put crops on it; next pass the fire over it for three succeeding years.
16. By covered drains.
17. I make all drains and ditches with the spade.
18. I have.
19. Iron Plough.
20. The common cattle of the country.
21. Horses.
22. Canadian horses.
23. Mixed; 6 lb. per head.
24. Berkshire, and grass fed; mixed potatoes and provender, boiled together, with a little salt and charcoal.
25. To keep each sort by itself; no more than four hogs by themselves; I would not keep more than 25 sheep in a flock; males and females; I do not permit the ram to co-habit with the flock until the 20th November.
26. Stone for out-fences, and cedar for cross-fences.
27. I have not.
28. No answer.
29. Answered in the 9th. I put a quarter of a bushel per acre of Corn; rows straight; 3 feet apart.
30. Square double harrow.
31. Use both.
32. and 33. No answers.
34. A small quantity for sheep, of white beans.
35. I do.
36. Answered in the 14th query.
37. I have; apples, cherries, and plums; I till it.
38. No answer.
39. I make both cheese and butter; 150 lbs of cheese per cow.
40. Wheat.
41. 13 inches for my soil.
42. I do not sow either.
43. I always plough in wheat and wheat and pease, harrowing the ground afterwards.

September 1st, 1850.

THE CULTIVATION AND USES OF CHICORY.

[Some arguing has been made of late respecting the introduction of this plant, for field culture in Canada. We could like much to see the experiment fairly made, and subjoin the following article from *Mortons' Cyclo-pedia of Agriculture*.]

CHICORY, or SOCCORY, is a perennial plant which is found wild in many parts of England, and various countries of Europe possessing a similar temperature. It has a similar root in shape to the parsnip, or white carrot, but smaller, growing from one or two feet in the ground, and in some instances sending its fibres downwards for four or five feet. The plant grows in form of a lettuce; bearing, after the first year, blue flowers upon a rough leafy stem, which shoots up from one to six feet high. Chicory has long been extensively cultivated on the Continent as an herbage and pasturage plant, and is much used as a salad; while in Flanders and Germany, the roots are in great request, as a substitute for coffee is prepared from them. After being introduced into the field culture in this kingdom, by Arthur Young, A. D. 1780, it was grown principally for sheep-feed, and found to be very profitable, as it will flourish upon almost any kind of land, and probably keep more sheep per acre, during the early summer months, than any other kind of herbage plant.—Lucerne requires a rich soil, or its cultivation will not be accompanied with much advantage; but chicory has been found to be abundantly profitable upon poor sandy lands, and soils which were weak and wanted rest, as well as on richer and more productive soils. It also thrives on fen and pea soils; and will last for seven or eight years, yielding several cuttings during each year, though the full crop is not obtained until the second year.

When it is intended to grow chicory for grazing purposes, the seed is usually sown broadcast in April, upon land that has been dug or deeply ploughed, from seven to twelve lbs. per acre; and growing in this manner, it forms a considerable proportion of many of the best meadows in the south of France, and in Lombardy. The best mode of culture, however, for a fodder or herbage crop, is as follows:—Prepare the soil, by thorough cleansing and pulverization, as early in the spring as the season will admit; apply a good coat of partially decayed fold-yard dung, and drill in the seed during March, four lbs. per acre, at about nine-inch intervals between the rows. When the plants are about five inches in height, carefully hoe them, and single out, leaving them about six inches apart, after the usual method in turnip culture—that is, by boys following the hoers. Some recommend that the seeds be sown in a bed, and when the plants are fit for transplanting—which will be when about five inches high—they are to be set out in rows nine inches apart, and at six-inch intervals from plant to plant in the rows. In either case, the land must be kept clean, and well hoed, particularly in the first season; ordinary attention will afterwards suffice, and the crop will continue luxuriant and profitable for five years at least, and frequently from eight to ten. When the plants begin to exhibit symptoms of failure, the ground should be cleared of the roots, another course of cropping pursued for a few years, and it may then be again sown or planted with chicory.

Like all other crops of a similar character, chicory will never attain to perfection, or even a full and profitable growth, if the plants are allowed to stand too closely together. The stem is branched, and clothed