

which, it may be presumed the land will be in proper condition for receiving the dung, prior to ridging up for sowing fall wheat, or, as *Agricola* suggests, allowing a portion to remain for spring wheat.

It is, perhaps, unnecessary to observe that lime and dung should never be applied together, as the fertilizing properties of dung are in a great measure dissipated by the chemical action of quick-lime. The year following, after harvest as soon as other work on the farm will admit of it, it is advisable to plow in the wheat stubble, a portion of which, say half or more, may with propriety be sown with pease in the spring. It is an approved practice to put the pease in with a drill, leaving an interval of twelve or fifteen inches between the rows, to allow of the effectual use of the hoe for the extirpation of thistles and other weeds during the growth of the crop. The remainder of the land, to be appropriated for growing potatoes and other roots. I may observe that the wire-worm and other grubs will occasionally destroy white turnips during the early stage of their growth, but it is a singular fact that those pests will not molest potatoes or Swede turnips (*Ruta Baga*). In my humble opinion grounded on experience of a few years in Canada, the best time for sowing Swede turnips is from the 15th to about the 25th of June. I may say by doing so, I have invariably succeeded in obtaining a crop, and never had to sow the seed a second time in the same season. It is absolutely necessary to have the land in good condition, cleared of all weeds and rubbish, and well pulverized by cultivation. A two rowed seed and manure drill is the best for putting in turnip seed with manure on slight ridges with an interval of about twenty four inches between each,—an excellent composition to drill with the seed, may be prepared of eight bushels of bone dust or half inches, one bushel of salt and eight or nine bushels of ashes to each acre, to be well mixed and screened, to be sufficiently dry when used so as not to interrupt the working of the drill. The fertilizing and alternative properties of this manure, will endure beyond the turnip crop and greatly benefit the succeeding crops. As soon as the plants are in rough leaf, the intervals ought to be well horse-hoed, just before the plants in the rows are thinned out, and kept quite clear of weeds by the horse and hand hoes during the after stages of their growth. The next crop in succession may be spring wheat or barley, with grass seeds of clover and timothy. If the pea and root land has been plowed in the fall, which is the best practice, it will be necessary prior to sowing the grain in the spring, to harrow and then go over it with the cultivator, to make proper channels for the reception of the seed. It perhaps would not be expedient under the circumstances of *Agricola's* farm having the wire-worm, to let it remain longer than one year in

grass; it may then be plowed early in the spring following and sown with oats, which will end the rotation. I am led to believe if your correspondent adopt this or some similar rotation of cropping, he will much mitigate the great evil he complains of, and by diligently weeding thistles and other pernicious weeds, out of all his crops during their growth, the result of his farming will be both profitable and pleasant to him. To sustain the fertility of the land, it is imperative to collect and take care of all the manure the farm produces. To avoid much of the waste caused by the spring floods washing away the juices of the manure in the barn yard, I deem it advisable to clear the yards as much as possible in February, and pile the dung in tolerably large heaps in the fields where it will be wanted. What liquids flow from the piles during the progress of decomposition are by this plan retained on the land. It occurs to me that the manure would probably benefit the fall wheat most, in the above rotation, and secure a better quality and perhaps more grain, if it could be spread on the sod prior to plowing for the oat crop. It would then become thoroughly incorporated with the soil in the process of fallowing for wheat. Practical and observant agriculturists hold that raw manure to a wheat crop encourages too much the growth of straw and makes it more subject to mildew and rust, thus deteriorating the grain. E. H. HENNING.

Chinguacousy, Nov. 21st, 1862.

[We are obliged to our correspondent for his valuable contribution, from which *Agricola* and our readers generally may gather useful suggestions. We shall be happy to hear from him again on the results of his agricultural observation and experience.—Ed.]

Transplanting Trees—Old Notions.

On looking over old recommendations and old practices, it must be admitted that the art of transplanting and managing fruit trees has made a great advancement. It is not beyond the memory of old men, that the recommendation was common to sow oats and plant potatoes in the holes in which newly set trees were placed—the reasons given were the loosening of the soil and shading of the surface. Others held the roots to their places by piling stones upon them. Others again, thought the best thing they could do was to fill the hole with fresh manure, or at least two or three inches of fresh manure directly in contact with the roots. We have seen an orchard of 300 peach trees set out in a clover meadow, without any further care, and where nearly all died the first year. Ten years ago, we inquired of a tree agent of close observation, and who had effected extensive sales of dwarf pears, what proportion of these trees were properly cared for, so as to prove successful and bear crops? His answer was