

*poaching*—the unploughed land. Some drills are made wide enough to cover the ridge, and in this case the horses walk up the furrows on each side, the drill being between them; but this is where the ridges are not more than 7 feet 6 inches wide. Where they are of the full width of nine feet, a drill covering half the ridge only is used: the horses, at length, walk up one furrow and down the other, completing at a "bout" the sowing of the whole ridge. The harrows take the whole ridge, the horses of course in the furrows with a long stretcher for the whipple-trees, and the roller is *broken-backed*, rolling two halves of contiguous ridges. The clover-leys are ploughed nine inches deep for wheat with a *skim-coulter* plough, and when the presser has been applied, I defy the most observant eye to see a particle of grass or weed from one end of the field to the other. Kent is not so skilled, as a rule, in general agriculture as the other Eastern counties, but as regards fruit- or hop-growing and the preparation of clover-leys for wheat, my beloved old county can beat the world.

Of course, in these days of reapers and mowers, care must be taken to slope off the sides of the water-furrows. I mentioned, I think, in my report on Mr. Aries' farm at Saint-Césaire last autumn, how very cleverly that gentleman had arranged his *rigolles*.

Root-growing on heavy land seems to be chiefly restricted to mangels, and, in Suffolk, their old strong point of sowing everything on a *stale-furrow* is carried out in its perfection by the farmers. The preparation of the land is begun immediately after harvest by looking over the stubbles and forking out any couch-grass or other root-weeds that may be in them. The land then receives a deep furrow; and is thrown up into 30-inch drills, and so lies rough and open till spring, and when dry, the manure—dung and some ammoniacal artificial—is applied, the drills split, and in April, by which time the spring frosts, the wind, and the sun, have well weathered the surface, a fine tilth will have been secured for the reception of the seed. I think this might be easily arranged for here, except the forking out of the couch, which would be impossible for two reasons: first, because no one could be found to take enough pains to do it properly, and secondly, because it would be too expensive. Still, with our early harvests, the cleanest stubble might be chosen, the grubber put across it both ways, and the ploughing, drilling up, manuring, &c., could be done before the frost came. I do not think much of the damage that would be caused by the spring-thaws washing the manure, as it would lie pretty securely in the ground, and the furrows between the drills would allow the melted snow to get away with ease. I fancy from what I hear, that most of the heavy land roots in the East of England are now grown in this way.

ARTHUR R. JENNER FUST.

#### Experiments in Tomato Growing.

EDS. COUNTRY GENTLEMAN—This season I grew eighteen different kinds of tomatoes for the purpose of knowing which kinds are most suitable for my soil and location. The soil I grew them in is a rather heavy loam, well manured and well cultivated. The seeds of the different kinds were sown in a greenhouse April 9th: all vegetated rapidly, and as soon as large enough the plants were transplanted into shallow boxes, using very rich soil. They were placed in a hot-bed, and kept growing without any check until planted in the open ground May 25th. They were thoroughly hardened off, however, before setting out. I do not care for extra large plants to set out, if they are stocky and well exposed to the atmosphere, so that they shall not feel the change in being transferred to the open ground. I plant in rows five feet

apart, and four feet between the plants in the row, do all the cultivating with a horse, and allow them to grow at will, with the exception of cutting off some of the foliage and young shoots, to allow a more free circulation of air and more sunshine to the fruit. I have tried tying up the vines, but find it unprofitable to the market gardener. (1) While the fruit may be and is cleaner and better flavored, I do not think so much fruit can be got as when they are allowed to lie upon the ground: nor do I think there is any difference in the time of ripening. (2)

The rot is the great drawback in some sections in tomato culture, not that I can see any particular kind of soil more favorable to rot than another. I have had similar success with the same varieties on very different soils. I have closely watched this rot pest for a good many years, and have concluded that, like grape rot, the cause is atmospheric. This season after planting we had a long dry spell of weather, lasting, in fact, until we had begun picking ripe fruit. We then had several days of close, rainy weather, followed by another dry period. Several days after the rain a good many of the tender-skinned varieties showed that rot had begun on much of the half-grown fruit; the small, newly formed fruit, as also what had begun to change in color, were exempt from it, but it destroyed nearly every half-grown fruit. As a consequence, we were without good fruit to pick after what were ripening had matured, until the small ones matured. I, however, picked off all the affected fruits as soon as I saw them, going over them every day, and removing them from the field altogether. This in itself, I think, is a means of checking the spread of the disease, as this season we had only the one attack of the disease upon our plants.

The first variety to ripen with me was Precursor, but it was one of the most wrinkled tomatoes I ever saw. No rot affected it, however, as it is one of the tough skinned kinds. Buist's Beauty, Livingston's Beauty, Cardinal, Perfection and Aome all ripened about the same time. All are excellent varieties, being smooth, ripening thoroughly, and of excellent flavor, but they are all liable to the rot. Favorite is my standard for fine fruit, fine color and excellent flavor; it is also comparatively free from rot.

In Mikado and Turner's Hybrid—if the seed were only carefully selected from the smoothest fruit—we should have an excellent tomato. I say tomato, because I consider both varieties the same thing, at least on my grounds. Although the seeds came from different seedsmen, and were sent out as true to name, there was no difference. With regard to selection of seed, if Improved Queen and Essex's Hybrid were carefully selected, I think two good varieties would be secured. They are both good tomatoes, solid, good color, but many of them badly wrinkled.

New White Apple is a well flavored white fruit, small in size, and most excellent for canning whole, and for sweet preserves.

Golden Queen was the best yellow tomato I had; the fruit is large, solid, and very smooth.

For my own taste, I prefer a yellow or white tomato to any other color. If grown on dry soil, they have a much better flavor than any of the pink or red kinds, grown on wet soil, they are liable to be too watery and not very solid.

Mahoning County, Ohio.

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#### The General-purpose Cow.

Every little while I see articles in the agricultural papers asserting that cows alike suitable for a profitable production of

(1) Because he will not try the single stem plan. He takes 20 square feet for one plant; I take 4 square feet. I have 10,890 plants on an acre; he, 2175.

(2) About ten days.

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