

of the ground before sowing the turnips, that is to say, out of the upper section of the soil. This would be the case if the ground had been plowed the fall previously, and then stirred occasionally with the harrow until the sowing of the seed.

It could be sown on the level, as in the absence of the process of thinning the same necessity would not exist for putting the roots in drills. They could then be cultivated without any thinning. It would be important to have the rows straight, that the cultivator could come close up to the line of the row. It has been demonstrated that roots thus grown have yielded in tops and roots nearly as many tons of food per acre as where the roots have been thinned, and some classes of roots, as mangels, for instance, have produced larger total yields from the roots unthinned. In fact, it is remarkable how nearly in weight the total yields are from a crop unthinned and thinned. But of course the tops, pound for pound, would not be worth so much for food as the roots. However, they make good food.

Such soiling food would come in nicely for cattle, more especially cows, and it would be a nice thing for swine. It would come handy also for sheep, and more especially for those that want a food to push them on, and it would be timely. It would come late after the corn had been nipped with the frost. In this way soiling food could be furnished until nearly freezing-up time; and fully thirty tons of it could be grown per acre.

A Western Farm Steading.

The accompanying sketch represents a farm home in a forest region of the west. The sketch is not typical of the real prairie home, as the forest represented in the rear of the buildings is natural, while on the prairie the protection furnished by trees is from groves that have been planted, except where the location is on the bank of a stream or lake. And on the prairie a bank barn is very seldom erected. The contrast in the growth of the orchard trees is somewhat striking when compared with those in our favorite fruit regions in Ontario. Nor has the forest that majestic growth which characterizes the trees of the land of the maple leaf. The cows are feeding on what is termed prairie land, but it is not the level prairie which characterizes the treeless regions of the west. The drifts have been carried down during the glacial period, for there lie the boulders, as they have lain through the departed centuries, sullen and silent. There is seldom more than one large barn erected upon a northwestern

farm home where the tuber is plentiful. The dry autumns have made it possible to secure the crop easily through stacking.

Sweet Potatoes.

Sweet potatoes are not much grown in our country, but doubtless there are locations where we can grow them, at least to a limited extent. In the United States they are grown extensively. In 1890 the crop amounted to 44,000,000 bushels. The culture of that crop in the United States has been deemed sufficiently important to justify the issuing of a bulletin on the subject by the Department of Agriculture at Washington. It was written by J. F. Duggar, and much of the information given in this paper has been taken from the said bulletin.

The sweet potato is usually propagated by means of buds or shoots from the roots. The roots are planted in hotbeds, and the buds or shoots which develop are then removed and transplanted to the field. It is possible to obtain plants from the true seed, or by planting portions of the roots, but the sweet potato seldom matures seed in the United States. The sprouts or shoots from the parent root are usually spoken of as sets. To obtain these sets, the eyes or buds on the sweet potato must be sprouted. The sets are ready for transplanting by the time they have got from three to five inches above the surface of the ground. And about ninety days are required after transplanting to mature the crop. The number of plants used per acre varies from 5,000 to 10,000.

The soils on which this tuber may be grown vary. Warm sandy soils are excellent, provided they have some loam in them, and are well stored with plant food. Cold clays are very unsuitable for growing this plant. Sweet potatoes should not be planted in any soil which adheres to or discolors the roots. In states where sweet potatoes are most freely grown, they are often made to follow a crop of crimson clover. Deep plowing in preparing the soil increases the yield of the potatoes, but it does not usually produce the most marketable tubers.

Sometimes the ground is made into low ridges on which the sets are planted. The rows should not be less than three and a half feet apart, and sometimes they are four feet, and the plants should not be nearer than fifteen to eighteen inches in the line of the row. In other instances they are planted in squares, and at a distance of not less than thirty inches each way.

The cultivation consists simply of stirring the soil occasionally and keeping it free from weeds.