PREPARATIONS FOR THE SECOND YEAR.

Preparations for the second year may be said to begin with the clearing-out of the old plants, and this should be done in a thorough manner. The roots of the plants should be forked out, the twine cut from the wires, and the whole removed and burned. The ashes from the burning should be returned to the soil, thus replacing a considerable portion of the mineral matter taken out by the plants. The soil should be dug up and left rough as before, so as to expose as much surface as possible, and the doors and ventilators opened wide, abundant light and air having a purifying effect on the soil. It is well known that the excreta from the roots of the tomato-plant are poisonous to future plants of the same kind. In open-air cultivation the poison is not present in sufficient quantity to affect a second crop, but it is injudicious to attempt to get a third crop from the same soil. In glasshouses the plants are grown closer together, and the toxic secretions are therefore proportionately larger. Aeration of the soil must have some cleansing effect, but it seems advisable to supplement this by growing some vegetable crop that may take up some of the deleterious matter. Field-peas are suggested for the purpose, as they are deep-rooting, rapid in growth, and decompose quickly after being turned under. Peas, however, will not do much good unless they are made to grow strongly, and as the soil will be dry if the tomatoes have been properly treated, it should be well flooded with water, the peas to be sown when the water has settled down. A dressing of superphosphate, 2 oz. per square yard, or 4 oz. of basic slag, should be given to ensure good growth in the peas. The green crop should be turned under in time to allow for the violent fermentation to take place before planting. Carbonic-acid gas, which is generated by fermentation of green matter, is poisonous to sprouting seeds, and is likely to be injurious to soft-wood plants. If it is possible to add some new soil, as advised earlier, there can be no doubt that will be more beneficial than anything else, and such an addition should supplement the green crop.

CULTIVATION IN POTS.

Tomatoes are successfully grown in pots, a method that is convenient for the production of early fruit where the house is furnished with plant stages and they cannot be planted in the ground. In a span-roofed structure the plants may be trained on wires under the roof, but it is not worth while to attempt it if other plants which require heavy shading are grown in the house. Tomatoes will not succeed under heavy shade; light shading will not hurt them, but if they are properly grown they require and are best with very little.