

where the champions of civic improvement, will have here a fine scope for their ingenuity.

Lawn Grass.—At the Walkerton Horticultural meeting much emphasis was given by the writer to the importance of a beautiful stretch of lawn about the home. It should be open in the front of the house, and not cut up by gravel roads, nor spoiled by flower beds or shrubs which are in place along the borders; the lawn should afford a place where the young people may enjoy a game of tennis or croquet, and where the children may join in a romp or game of ball. When speaking on the same subject to the Brampton people, Mr. A. Gilchrist, of West Toronto Junction, who was also one of the speakers, suggested a good mixture for sowing such a lawn; his formula which he had tried and found most satisfactory even on unfavorable soil, is made as follows: Kentucky blue grass, 10 lbs.; Red Top, 1 lb.; Vernal, $\frac{1}{4}$ lb.; White Clover, $\frac{1}{4}$ lb. He advised trying bone dust as a fertilizer, sowing about twenty pounds of it to every 1000 square feet of surface.

Fertility of Orchard Soil is one of the important problems in Ontario, where the humus and the elements of plant food have been to such a large extent extracted by grain crops. Fortunately perhaps for the soil in our province, wheat raising is no longer profitable, and our farmers are being compelled to give attention to hoed crops, or to stock raising, both of which tend to restore its fertility.

Mr. Duncan Anderson, in his addresses at Bartonville and Grantham emphasized the great superiority of barn manures over commercial fertilizers, not because they contained any more potash, phosphoric acid and nitrogen for the same money invested, but because of the humus they furnished, with-

out which it would appear that these elements cannot well be taken up by the plant.

Prof. Ladd of North Dakota station, has been making special investigations along this line and finds that as humus decreases in soils they become less productive, less retentive of moisture, and inferior in physical quality, while on the other hand it was found that an increase in the percentage of humus was accompanied by an increase in the percentage of phosphoric acid and also with a greater productivity of the soil. As the humus increases it seems to cause portions of the phosphoric acid, till then existing in an insoluble form, to become transformed into a soluble form, and thus, presumably, to become more readily available as plant food. The same is true as regards the potash, lime and other soil constituents. A decided increase of humus and nitrogen may be secured in orchard land by growing such leguminous crops as peas or clover, which are nitrogen accumulators.

The writer had signal success in a mixed orchard of pear, plum and apple trees, which were not growing well and producing very little fruit and that of inferior size. Crimson clover was sown in August, and the following spring a light dressing of ashes, about fifty bushels, and about fifty lbs. of bone dust, to the acre were sown, and the whole ploughed under. The ground was then cultivated until about August 1st, when the same treatment was pursued again. As a result the trees became quite thrifty, and bore generous crops of very highly colored fruit, seeming to prove that this treatment was almost ideal. The soil was a clay loam.

Gold and Wickson Plums. Both these much lauded varieties are condemned by Prof. Waugh of Burlington, Vt., in his last report, for the commercial orchard. The former he says is uncertain in bearing, and gives only light crops of small and second rate fruit. It