us by the Principal (Prof. Mills), the Professor of Agriculture (Prof. Brown), and to the able and painstaking manner in which the Head Gardener, Mr. Forsyth, has discharged the onerous duties devolving upon him.

All of which is respectfully submitted.

P. C. DEMPSEY. WM. SAUNDERS. D. W. BEADLE. to fi

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## SMALL FRUIT CULTURE.

By B. GOTT, ARKONA.

It is a task not easily defined to state with precision just which kind of soil is positively best for the different classes of small fruits. We doubt not that different results will be obtained by planting the same fruit on different soils, and much more different by planting different fruit on different soils; but to say exactly which is the best for obtaining the best results is a question for scientific and superior investigation. At a former period in our experience, we most decidedly held the opinion that a fine, strong, well-drained sandy loam, rich in vegetable ingredients, and not too loose, was the best possible condition of soil for strawberries and raspberries; but later on in our course of fruit culture, and as our observations widened in these matters, our opinion came gradually to a wide and material difference of caste, and now we strongly lean to a preference for a strong and well-drained clay loam for both these fruits, if not too much condensed.

One of our local growers has a small fruit farm established on just such a description of soil as this last, and the results of his plantings are all that could be desired—plenty of fruit, and of fine quality. If there is any advantage in favour of the sandy loam for small fruits, it may be on the score of wintering; for on this soil the plants do not appear so liable to frost and heaving as on the clay soil. The flavour, too, may be very much finer in fruits from sandy soil, but we most emphatically deny that the fruit may be either more or of better quality. Any of our clay loams, therefore, of proper texture, and if thoroughly and systematically drained, are clearly suitable for the successful growth and development of small fruit plants and of the finest possible quality of fruit.

With these preliminaries we will at once proceed with our subject in hand, viz.: Character of Soil for Small Fruits; Its Preparation, Culture, etc. By small fruits we shall at present understand to be meant our popular berries, as strawberries, raspberries, blackberries, gooseberries, and currants; and for their successful culture we shall prefer a medium clayish loam, of a dark colour and a crumbly texture, and very rich in vegetable matters in composition, and laying on a solid clay subsoil at the depth of from twelve to twenty inches from the surface.

We would prefer the surface to be nearly on a level, or, at the most, with merely gentle slopes to prevent severe washing from heavy and frequent rains. The whole must be thoroughly underdrained, by laying at systematic distances hard-burnt clay tile, two inches in diameter in the bore, and from two to three feet under the surface. These drains should not be more than twenty or thirty feet apart, according to the dryness or wetness of the soil, and the whole laid with a careful reference to a good and efficient outlet. The mode of preparation consists in thoroughly cleansing the ground of all annoyances, as stumps, stones, sticks, etc., as impediments to the easy progress of the plough and the cultivator. Before the planting is done the ground must be thoroughly broken up to a depth of ten or twelve inches by good ploughing and subsoiling, and after cultivation during the entire summer. For the soil I am now describing being in a virgin state and unexhausted, very little application of artificial fertilizers is required; but if the ground is worn out, or in the least depleted of its vegetable fertility, those artificial stimulants must be most certainly applied with unsparing liberality. This application, in the main, must be made during the workings of the summer months.

The after culture consists, in the main, of a thorough and constant moving and stirring of the soil to prevent the effects of summer drouth and the progress of the least tiny weed. This point—the eradication of all weeds—must be most assiduously attended