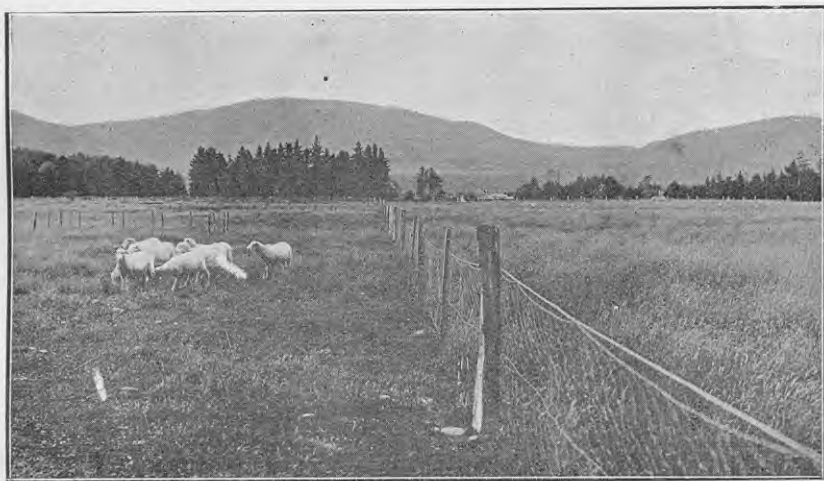


where a soft marl containing 70-80 per cent. carbonate of lime, dug from a roadside cutting at a cost of a few pence per ton royalty in addition to the cost of cartage and labour, was used with striking results. (See January, 1916, *Journal*, p. 10.)

The matter of ground limestone was discussed in an article in the *Journal* for April, 1914 (see also a note in the issue of November, 1914, p. 328), where it was suggested that the screenings from limestone quarries should be used on the land. On visiting the Mauriceville lime-works the writer found a large dump of rejections from the quarry. Similar material is also to be obtained at Te Kuiti, and no doubt at other quarries. The labour in handling and carting such rough moist material is at present the only bar to its use. The pasture top-dressing



A CONTRAST DUE TO THE USE OF LIMESTONE.

Paddock on right of fence top-dressed with rough rubble limestone and phosphate; paddock on left untreated. At the period the photo was taken the dressed paddock was carrying twenty-eight sheep, as against eight on the undressed, both paddocks being 5 acres in area. See account of pasture top-dressing experiments at Wallaceville Laboratory Farm (paddocks 2 and 3) in last month's *Journal*.

experiments conducted at the Wallaceville Laboratory Farm, as recorded in last month's *Journal*, supply a convincing record as to the value of limestone used in the rough state.

CONCLUSIONS.

The outstanding deficiency in New Zealand soils, which has been proved by agricultural practice and also by chemical analysis, is that of phosphates—nitrogen and potash being usually present in fair amount, and addition of these fertilizer constituents to ordinary crops not having usually proved remunerative.

Enormous quantities of phosphates have been imported and used, especially on the North Island lands, during the past decade or so. The practice still survives as strongly as ever, but now neither the quality