

THE BUSH-SICKNESS INVESTIGATION.

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SOME EXPERIMENTS CONCLUDED.

THE whole of the first series of practical experiments in connection with this investigation, commenced over two years since, have now been concluded. These consisted of the application of various soil-dressings to small paddocks, followed by the grazing of cattle or sheep upon them. Three of these experiments must be looked upon as having been distinctly successful so far as cattle are concerned, and detailed particulars concerning them will no doubt be of interest, though during their progress they have been more than once referred to in the *Journal* as well as in the Annual Report. Following are the particulars:—

Cattle Experiment No. 1.

Land: Partially cleared bush, many stumps and fallen logs being present in the paddocks, surface-sown with grass (principally cocksfoot) and clover. Feed: Plentiful and presenting every appearance of being of good quality.

Paddock, 4 acres, top-dressed with superphosphate, 7 cwt. to acre;* good water available. Three steers, about a year and eight months old, placed in this paddock in April, 1911. Previously, on the 8th January, 1911, three steers of like class, then eighteen months old, had been placed on adjoining land, not top-dressed. These had the same water-supply, and their pasture was apparently equally good, except for the lack of top-dressing, and was much less closely stocked. They, however, had a wide range of pasture, whereas the three on the top-dressed paddock were limited to the 4 acres comprising it. As a matter of fact, the food became so scarce in this paddock in August last that these animals had to be removed to untreated land for four weeks in order to allow the grass to recover itself somewhat. These three steers are at the time of writing (April, 1913) still alive and in good health (see photo.), and, moreover, have grown and developed well throughout. The three control steers have all died of bush sickness, the symptoms exhibited being typical and the clinical opinion confirmed by post-mortem examination.

The first control animal apparently exhibited the initial premonitory symptoms on the 30th April, 1911, and died on the 14th February,

*It is to be noted that the above quantities of fertilizers are large, and are not necessarily those which would be adopted in farming practice.