between the late spring and early autumn. It was also considered that by such treatment less injury would be done to the soil when feeding off swedes or suchlike crops in the winter season, and that the stock would benefit by the dryer and warmer soil conditions prevailing.

A scheme was consequently drawn up whereby all the land with the exception of a small area was subdrained by the mole plough at intervals of 7 ft. Pipe connections and outlets were put in when necessary. The cost of this work was approximately £3 per acre. After the land had been drained it was divided into four areas, as follows :—

Area A consisted of $5\frac{4}{11}$ acres, plots 1 to 9 inclusive. Ground limestone at the rate of 1 ton per acre was applied to all acre plots, the balance consisting of strips of $\frac{1}{11}$ acre each dividing the acre plots from one another. These were treated in various ways for observation purposes.

Area B consisted of $5\frac{4}{11}$ acres, plots 10 to 19 inclusive. Ground limestone at 1 ton per acre was applied to all plots large and small. Upon this area a light crop of green oats was ploughed under in the early spring of 1915.

Area C consisted of $5\frac{4}{11}$ acres, plots 20 to 29 inclusive. Ground limestone, 1 ton per acre, was given to all plots. Green oats were ploughed under in early spring of 1915. All plots were also subsoiled to an extra depth of about 4 in.

Area "Triangle" consisted of a small area undrained and not recently limed.

In all cases in the areas A, B, C, the trial plots are the acre plots. The divisional plots between each acre plot—viz., $\frac{1}{11}$ acre strip—are treated in different manner for observation purposes only.

Last season the whole area was sown in kales and rape, which were fed off with sheep. The plots to be green-manured were subsequently ploughed and sown in oats, and the area without green manure was also ploughed. The green manure was turned under in the early spring.

According to the scheme arranged it was proposed to work this land for a period under a regular rotation, with a view to improving its fertility and ultimately rendering it more productive and suitable for the satisfactory growth of many other varieties of crops in addition to cereals. The rotation was as follows: Red clover two years, then wheat, turnips, or a similar crop, followed by oats or a similar crop. The land was to be sown down to grass with the clover crop following if it was desired to then put it out of cultivation for a period.

Green's Ruakura oat was the oat used for the season, and grew well. The boisterous winds and rains in the early part of the season, however, played great havoc with the crop, and some of the plots were badly laid. Hence records of yields are unreliable, since some crops were more difficult to cut than others. The chaff actually cut and bagged, however, off $1\frac{2}{11}$ acres on area C (drained, limed, green-manured, and subsoiled) was at the rate of 4·27 tons per acre. Area B (drained, limed, green-manured), which on account of rough weather was badly laid, only yielded at the rate of 1·66 tons per acre. Area A (drained and limed) yielded 3·047 tons per acre.

In the oat plots the amount of seed and manure sown in each case was as near as the drill used would put same out—viz., 127 lb. oats