

## THE GRASSLANDS OF NEW ZEALAND.

### PRINCIPLES OF PASTURE-ESTABLISHMENT.

(Concluded.)

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#### QUALITY OF SEED AND METHOD OF SOWING.

WITH regard to agricultural seeds there should be only one quality sown—namely, the best. It may be laid down as an axiom that “cheap” poor seed is always expensive. Many samples of reputedly cheap seeds have been analysed at the seed-testing station of this Department, and never in one instance could the individual living seeds of the sample be called cheap. In connection with the accompanying photograph of 5 grams of a typical “cheap” mixture (Fig. III), it was worked out that the real value of this mixture was approximately  $4\frac{3}{4}$ d. per pound, and unless a farmer could buy such a mixture for considerably less than  $4\frac{3}{4}$ d. he could not in any way congratulate himself on his deal. It is true he will not get a pound of a good mixture for  $4\frac{3}{4}$ d., but he will get more living desirable plants in  $4\frac{3}{4}$ d. worth of a good viable clean line of seed, and it is the living desirable plants that the farmer requires and which he pays to get. The price asked for this mixture was in the neighbourhood of  $6\frac{1}{2}$ d. per pound, which makes it quite an expensive seed as far as the viable seeds in it are concerned.\* There may, of course, be times when the farmer can strike a bargain in buying seeds, but the selection of cheap mixtures demands great judgment on the part of the buyer to ensure that the bargain is not on the side of the vendor.

It is admitted that there are certain types of country which demand cheapness of sowing. A cheap sowing, however, does not imply that the seed used should be a cheap, low-grade seed of any particular variety, but that the amount of money spent per acre must be low. Just how to ensure this cheapness and also secure satisfactory results is a problem, with our present knowledge, difficult of solution. It is an extremely unfortunate thing for farmers located on poor rough country that the seeds of plants fitted for such country are expensive, owing no doubt to the cost and difficulty of harvesting them. Cheapness per acre of seeding can be secured (1) by limiting the amount sown—by putting in a certain amount of the desirable elements, and then, by spelling, allowing a certain amount of reseedling; (2) by sowing seeds of inexpensive varieties—but unfortunately rye-grass, Yorkshire fog, and suckling-clover are about the only inexpensive ones that could be used, and rye-grass is of no use as a permanent element on such country; (3) by using “cheap” mixtures, dressings, seconds, &c., which are usually sold

\* The same mixture is shown semi-diagrammatically, in greater detail, on page 166 of the *Journal* for September, 1918.