

ENSILAGE AND PASTURE MANAGEMENT.

THE TRENCH SILO.

G. W. WILD, B.Ag., Instructor in Agriculture, Hamilton.

ALTHOUGH the making of ensilage has long been practised to some extent in New Zealand dairying districts, it is only during the last two or three years that it has become at all general. Roots and hay have always been the staple winter fodder for dairy cows, and roots must remain so wherever a farm is being broken in from the rough. Under such conditions the laying-down of land to crop is usually a preparatory measure to the ultimate establishment of permanent pasture. But with the great improvement in our grasslands of recent years, due mainly to the liberal use of phosphatic manures, dairymen have become less and less favourable to giving over a good pasture to the plough. For several reasons root crops have proved less profitable in the course of time. This is due to many factors—the waning of the natural soil-fertility, the invasion of certain aggressive weeds such as Californian thistle, the prevalence of diseases, and the ban imposed by dairy factories on forage-tainted milk. This last factor means that all root crops have to be carted out to stock and allowed to wilt before being fed to dairy cattle. There are also the vagaries of the climate—wet springs when cropping is delayed, and dry periods sometimes prolonged to such an extent that root crops become practically a failure.

The drought experienced in Auckland Province last season is a case in point. Supplementary forage crops were generally a failure, and growers were "let down" badly. On the other hand, crops other than annuals are finding increasing favour with dairy-farmers. The permanent grass crop is supreme in this respect, and intensive manuring and better control and management of grassland has brought about great improvement in permanent pastures. The grass crop is at least a certainty until the New Year, and up till that time the portion of it that cannot be consumed by the dairy cattle can be conserved as ensilage. The utilization by grazing of all the spring grass is next to impossible, but as hay and ensilage it forms an insurance against periods of uncertain growth. Ensilage is a fodder that is available to dairy stock shortly after the material is harvested. It can also be kept a year or two, or even more, if necessary, and for this reason alone it is the most valuable succulent fodder.

The foregoing remarks, of course, must not be taken as depreciatory of the value of good hay in the diet, nor as advocating the abandonment of hay production or auxiliary cropping under all conditions.

The present article is written mainly to deal with the labour-economy factor as it affects ensilage. The stack-ensilage method, besides being wasteful of material, usually requires a gang of men for its successful handling. Groups of farmers work in excellently together, yet this system has certain disadvantages. With the present methods of stacking the gang is required for four or five days under the best conditions. If for any reason the gang cannot be kept intact for this length of time the operation is often unduly prolonged. This results in the ensilage running to high temperature, and is the cause of the