

SEASONAL NOTES.

THE FARM.

Some Aspects of Feed-provision in Sheep-farming.

Two features of sheep-farming are of particular practical importance at present.

In the first place the high ruling prices for sheep and for the main products in sheep-farming make it increasingly desirable both to lessen losses due to avoidable deaths in the flocks and to increase the returns from each unit of production; each sheep that dies now is a greater loss than was the death of a similar sheep in the recent past, and quite often each producing unit is associated with an increase in depreciation and in other items in the cost of production.

In the second place, it is well established that in stock-mortality, in lamb-production, and in wool-production much depends on the feeding of the sheep throughout the year, and particularly on the feeding during the winter and early spring months.

That there is a connection between the feeding of sheep and their disorders and diseases generally is understood, but quite often it seems to be understood in really an inadequate and hazy fashion that does not lead to the due measure of attention being given to the work with pastures and crops that brings about proper feeding. Hence some of the major instances in which there is relationship between the feeding and the troubles of sheep seem worth noting. For instance, antepartum paralysis or "dopiness" of ewes is a nutritional disease definitely associated, as a rule, with ewes falling off in condition at the approach of lambing. The incidence of "bearing" trouble is considered often to be connected with the type of feed. Underfeeding at some period during pregnancy is commonly accepted as an important cause of premature births of lambs, of dead lambs in the womb, and of lambs dying or being weak or small at birth. Veterinary research tends to show that rickets is one of the causes of losses in hoggets during the winter and spring months, and so it is of practical significance that rickets can be produced experimentally by feeding a diet deficient in its content of minerals—*e.g.*, lime and phosphates. Nutritional measures form one of the first lines of defence against internal animal parasites. The value of good feeding in combating such parasites often is ignored in practice; drenching without good feeding is apt to give unsatisfactory results. Regarding this point the Director of the Live-stock Division, in the 1936 annual report of the Department of Agriculture, states,—

"In attacking the problem of internal parasites of sheep too much reliance must not be placed on the specific action of any anthelmintic agent whilst neglecting the maintenance of the lambs' strength by the provision of extra suitable supplementary feed. In this respect the feeding of chaff, oats, and good hay will be found to produce good results. The difficulty which is said to be experienced in getting hoggets to eat hay in the early winter might be overcome by educating them earlier to take it. . . . The benefits of such practice are indicated in seasons when through abnormal conditions the pasture . . . cannot be maintained in that short condition which provides the best sheep feed."

Incidentally it already has been indicated herein that feeding has a considerable influence on the percentage of lambs obtained. The ewe that inherits the capacity to produce twin lambs does not necessarily give birth to twin lambs; with unsuitable feeding or management she