SEASONAL NOTES.

THE FARM.

Co-ordinate Phases in Grass Farming: Utilization and Production of Feed.

At times neighbouring farmers working with pastures and stock which are essentially similar obtain very different returns from identical top-dressing programmes. One of the factors which readily may cause the different results is of particular current importance. It arises from the fact that top-dressing normally results in the production not only of extra feed when it is badly needed, but also of extra feed at seasons when there would be ample feed without top-dressing. If this latter additional feed is not appropriately used, and if it is allowed to lead in spring and early summer to the development of coarse stemmy growth, then the good done at one season by top-dressing may be nearly, or even more than wholly, counterbalanced by the undesirable results at the later stage. In short, really judicious autumn or spring top-dressing may be far from fully effective because its subsequent influence is not controlled or modified suitably. Hence farmers at times condemn top-dressing without any true justification for doing so. Consideration of their experience usually shows that topdressing has done all that it reasonably could be expected to do-it has given additional feed. The farmer who disparages his top-dressing under such circumstances is in error; it is he who has failed-failed in not linking the top-dressing with other measures which enable the extra growth that has been produced to be utilized properly.

Incidentally, the benefit from any other practice which, like top-dressing, begets increased summer pasture-growth may be restricted, or even elimi-

nated, by inefficient utilization of the feed available.

One phase of this matter which warrants further consideration is that the results of poor utilization comprise not merely poor returns from the feed produced but also frequently include deterioration of the sward and a consequent decline in its productive capacity. This is because poor utilization of grassland usually involves both too light grazing in the late spring and summer and over-grazing in the winter and early spring-a type of grazing-management which tends to the progressive weakening of the species which produce feed early in the season and a strengthening of those which make late growth. In the mixed pastures characteristic of very extensive areas, this tends to the suppression of perennial rye-grass and the dominance of species akin to brown-top and sweet vernal. In short, there is growing evidence that generally conditions of soil and climate do not determine the botanical composition of a pasture so completely as is often believed, and that frequently the method of grazing is the real determining factor. While this generalization is not valid in respect to extremes of soils and climates when the influence of grazing management may be counterbalanced or masked by the greater influence of soil or climate, it is, nevertheless, so widely valid as to warrant more attention by farmers to the utilization of the growth of pastures. Production of feed is only one phase of farmmanagement, and if production of feed is not linked with suitable utilization it is certain that the fullest possible returns will not be obtained.

An important cause of this result is that poor utilization, apart from its harmful effect on the pastures themselves, leads frequently to stock being fed badly at two critical periods each year, whereas by good utilization an equal number of stock could be relatively well fed without increasing the total amount of feed available; under poor utilization the supply of feed normally is not only wastefully excessive but also lacking in quality