

## FORAGE CROPS.

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### SUMMER FORAGES.

AN old worn-out pasture that requires renewing may with advantage be devoted to the production of a course of summer forage crops. For this purpose the land should be ploughed in the late autumn, and permitted to lie exposed to the rain and atmosphere during the winter months. In the spring cross-plough and subsoil as deeply as the land will allow, and later, when the time for sowing is near, work down with disk and harrows until the seed-bed is made as fine and friable as possible. The extent to which the roller can be used at that period of the year can only be decided at the time and on the spot. The simplest way to determine whether it is advisable to roll cloddy ground is to kick some of the clods. If the clods fall apart the roller may be used, but if they are difficult to break and the ground is at all moist the roller should not be employed. Rolling is not satisfactory if the clods are merely forced into the soil without being broken up, for this only results in a hard crust being formed on the surface. Depth of cultivation, thorough preparation of the land, and a fine mellow seed-bed are all important.

If after a few days there appears to be a superfluity of water in the soil it is an indication that the land requires draining. Waterlogged land when it does dry loses nearly the whole of its moisture by evaporation. On the other hand, the small particles in a friable soil check capillary action, and thereby prevent undue evaporation, the soil remaining moist long after sodden parts of the field have become as hard as a brick. If drainage is required it should be done, as it pays, and pays handsomely. Drainage has an intimate relation to soil-moisture. By drainage is meant the means employed for the removal of the surplus free water. Surface or open ditches may serve to carry off surface water, but as soil-drainers they function imperfectly. The correct method for removing the surplus water of rainfall is to cause it to sink into the soil and be removed by under-drains.

The following course of summer forages will be found of valuable assistance to farmers, and especially dairymen who desire to keep up a good steady supply of milk during the season :—

For a dairy herd of from sixty to seventy in number sow 5 acres of oats and grey spring tares about the second week of October, at the rate of 2 bushels of oats and 1 bushel tares to the acre. These should be ready for feeding in January, and if not required can be utilized for hay or ensilage. In the first week of November sow 4 acres with soft turnips—purple-top Mammoth, Imperial Green Globe, or Lincolnshire Red. These should serve for February and March feeding.

In addition to the foregoing, sow between the third week of November and the second week of December from 5 to 8 acres of any of the forages