CULTIVATION.

Under irrigation frequent cultivation of lucerne is of great necessity. One of the commonest causes of a lucerne stand rapidly going out is the intrusion of weed plants. Of these probably the grasses are most aggressive, and it is only by repeated cultivation that their invasion can be arrested. By cultivating during the winter months at least twice with a strong spring-tooth cultivator the bulk of the weeds can be kept under control. Where it is possible a cultivation after each cutting is desirable. Not only will cultivation of this description check the growth of weeds, but its secondary effect of breaking up the consolidated soil, thus separating it and lessening the rate of evaporation, will be of great advantage in maintaining the vitality of the crop. Any damage likely to accrue from this practice may be considered as negligible in contrast with the benefits conferred on the crop.

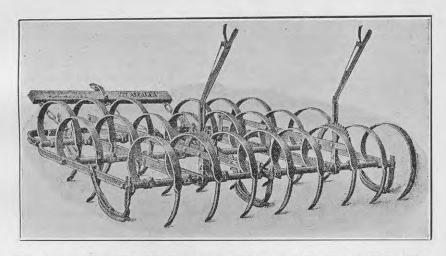


FIG. 58. SPRING-TOOTH HARROW OF TYPE SUITABLE FOR CULTIVATION OF LUCERNE. Note the narrow teeth on the tines.

WINTER IRRIGATION.

So far the winter irrigation of lucerne has not been practised in Central Otago. In the near future, as the land becomes more closely settled and large areas of the lighter soils are brought under cultivation, it will probably be of advantage to give the land a good irrigation during the months of July or August. Winter irrigation will probably be of greater advantage on permanent pastures than on lucerne. The chief advantages of winter irrigation, apart from supplying the soil with a store of moisture, would appear to lie in the fact that lucerne is not likely to be damaged by frost, and that the mechanical condition of the soil is improved.