

lightly as the plough can be got to run; not more than 3 in. deep at the outside, and less if possible. This is merely turning over the top 3 in. of soil that the lime has been thoroughly mixed through by the cultivation in connection with the turnip crop. If the land is then sown with grass the result is immediate, and the grass comes away very much more quickly than if the land is only limed before sowing the grass.

EFFECTS OF LIMING.

The effect of lime on our South grass-lands, where they have been thoroughly drained, is nothing short of marvellous. It seems to completely alter the nature of the soil. The growth of all the best grasses, and particularly clovers, is promoted to an enormous extent, and the lime either has the effect of directly checking the weeds, couch, and other valueless grasses, or else the effect is indirect through the growth of valuable clovers and grasses being so stimulated that they smother and destroy the more worthless plants. While grain and root crops are greatly benefited by the use of lime before sowing, the greatest benefit is derived by grass, and by the grain and root crops that are grown after the lime-dressed land is broken up again. How long the effect of a dressing of 2 tons to the acre will last I cannot say, but I know that land that has been limed and left down to grass for twenty years has been enormously benefited by it. No land seems to give such good and quick returns from root, grain, or green crops as an old grass-paddock that has been limed previously when it was sown down in grass. Possibly much of the lime itself may have been lost, but the increased growth of grass—particularly clovers—brought about by the application of lime seems to fill the ground with humus, enormously increases its fertility, and thoroughly changes its nature. Lime not only increases the quantity of the grass and clover and subsequent grain and root crops, but it seems to have a great effect on the quality. Stock fattens and thrives very much better and faster on limed land than on land that is unlimed, and the carrying-capacity is largely increased.

LIME AND ARTIFICIAL MANURES.

Lime seems to be of great assistance to artificial manures. Crops and grass respond much better to artificial manures on limed land than on unlimed. The farmers in the South who are the largest users of artificial manures are those who have limed. Nitrogenous manures are not so much wanted on limed land. The growth of clover is largely promoted by lime. Clover collects