

only furnish a supply of food immediately available for the crop, but will aid in keeping the soil in a moist condition, which is important in clover growing. Heavy clay soils require underdraining before they will give their best returns with clover. A moist, mellow, well aerated soil, which is most suitable for successful clover growing, cannot often be had on stiff clay land which has not been drained.

#### SUMMARY.

The advantages connected with the ploughing under of clover may be summed up as follows:—

**1. There is an enrichment of the soil by the addition of nitrogen obtained from the atmosphere.**

**2. There is an increase to the store of available mineral plant food (phosphoric acid, potash and lime) in the surface soil taken by the clover in part from depths not reached by the shallower root systems of other farm crops.**

**3. There is a large addition of humus, whereby the soil is made more retentive of moisture, warmer and better aerated, conditions favourable to vigorous crop growth. Humus also furnishes the material best adapted for the development of those forms of germ life that act so beneficially in the soil.**

**4. As an agent for deepening and mellowing soils, no crop gives such satisfactory results as clover.**

**5. Clover also serves a useful purpose as a catch crop during the autumn months, when the ground would be otherwise bare, retaining fertilizing material brought down by the rain, and also that formed in the soil during the summer months, much of which would otherwise be lost through the leaching action of rains.**

**6. As shown conclusively by the particulars we have submitted, obtained by careful experiment over a number of years with the more important farm crops, the ploughing under of green clover has a most marked effect in increasing the soil's productiveness.**