

## CLOVER RESIDUES WITH PROPORTION OF NITROGEN (1897).

	Weight of clover residues per acre.		Nitrogen per acre.
	Tons.	Lbs.	Lbs.
Plot 1—Mammoth Red clover, 14 lbs. per acre.....	3	636	59
Plot 2— " " 12 " .....	3	976	77
Plot 3— " " 10 " .....	2	1,955	81
Plot 4— " " 8 " .....	3	976	76
Plot 5— " " 6 " .....	3	806	70
Plot 6— " " 4 " .....	2	594	58
Plot 7—Common Red clover, 10 " .....	3	125	62
Plot 8—Alsike clover, 6 " .....	1	1,233	33
Plot 9—Alfalfa, 14 " .....	1	212	26

It is evident from these particulars that notable amounts of nitrogen are present in these residues, and that winter killing of the clover does not form a sufficient excuse for neglecting this economical mode of enriching the soil.

## IS THE PLOUGHING UNDER OF CLOVER AN ECONOMICAL PRACTICE?

It is urged by some that the burying of such a large amount of rich food as is contained in a crop of clover is wasteful. This would undoubtedly be true if the farmer had the stock to consume it, for by feeding the clover a part of it would be converted into high-priced animal products, and the manure produced and returned to the soil would give back about 75 per cent of the fertilizing elements contained in the crop. On most farms, however, there is not sufficient stock for such purpose, and in such cases we would strongly advise the growing and ploughing under of clover for recovering, maintaining and increasing the fertility of soils, as we know of no other material of equal fertilizing value that can be so cheaply obtained. We have shown that by sowing 10 or 12 lbs. of Common Red clover seed per acre, costing about \$1 to \$1.25, there would be a gain of at least 100 lbs. of nitrogen, the lowest price for which in artificial fertilizers is 10 cents per lb. Further, the added store of humus with its associated mineral elements is also of much value. Even when it is found desirable to harvest the crop and sell it off, the land will be considerably enriched, since nearly one-half of the fertilizing constituents of the clover is to be found in the roots.

## CLOVER COMPARED WITH BARN-YARD MANURE AS A FERTILIZER.

At the outset it should be understood that in advocating green manuring with clover, this crop is not brought forward as a material to replace barn-yard manure, but rather to supplement it and to make its application more effective. Barn-yard manure of good average quality contains about the following proportions of the chief fertilizing constituents:—

Nitrogen.....	10 lbs. per ton.
Phosphoric acid.....	5 "
Potash.....	9 "