

The fertilizer universally used is barnyard or stable manure. Such contains, if of good average quality, about ten pounds of nitrogen per ton. It is evident, therefore, that by this clover method we can furnish the soil with at least as much nitrogen as would be supplied by a dressing of ten tons of manure per acre. And in addition to this nitrogen—the greater part of which is obtained from an otherwise unavailable source—there are, as we have already pointed out, considerable amounts of potash, phosphoric acid and lime, liberated in the decay of the clover, in forms much more valuable as plant food than they were originally, and therefore in a very true sense to be considered as a distinct addition to the soil's store of available mineral plant food.

It might be urged that the burying of such a large amount of rich food material as is contained in a crop of clover is wasteful and bad farming practice. This, in a certain measure, is true if the farmer has the stock to consume it, for by feeding it there is the opportunity of converting a part into high-priced animal products and returning to the soil by far the larger portion (practically 75 per cent.) of the fertilizing elements of the crop in the waste product of the animal economy. On too many farms, however, there is not sufficient stock for this purpose. We have indeed in this fact the reason for many of our exhausted soils in the older provinces, where farming in certain districts has consisted in growing grain, or oats, or hay, year after year. For such districts, even where stock is now kept in greater numbers, we strongly advocate the growing of clover for recovering fertility, for we know of no fertilizer or manure of equal value that can be so cheaply purchased. The benefits that I have enumerated are to be procured from sowing eight to ten pounds of clover seed per acre, costing \$1 to \$1.25. The lowest price for nitrogen in fertilizers is ten cents per pound. Since, as we have seen, practically 100 pounds, can be obtained by this method of green manuring, a moderate estimate of the manurial value of the clover would be \$10 per acre.

But nearly one-half of the fertilizing value of clover is in the roots, so that when the crop is harvested and sold off the farm there is still a large addition to the soil's store of available plant food and the land is considerably enriched.