COMMERCIAL FERTILIZERS COMPARED WITH STABLE MANURE.

of December last, Mr. Geo. W. Bowker read a paper on "Manures for the Vegetable Garden," and in the course of the discussion following he very strongly advocated the liberal use of commercial fertilizers. Mr. Bowker, says the *American Garden*, would not have it understood that he would have market gardeners dispense with stable manure altogether. He would have them use only enough stable

manure to keep up the vegetable tilth, and supplement it with concentrated fertilizers. He would advocate that course on the score of economy, for what need is there in carting manure eight or ten miles out of the cities to get only twenty-five pounds of actual plant food to the ton! For, according to Prof. Goessman, that is all the plant food there is in two thousand pounds of stable manure, the remaining 1,975 pounds being silicates and organic matter that most market gardens contain.

The market gardener near our large cities, working high-priced land, is compelled to use some stable manure, but upon the cheaper interior land a part of the garden can remain in grass, and from time to time this grass land can be turned over, thus furnishing the same kind of organic matter that is contained in stable manure. The additional fertility required can be obtained from fertilizers. To the market gardener who had, for the past fifteen or twenty years, been applying stable manure at the rate of fifteen cords per acre, he would say to him, stop, and instead of stable manure use commercial fertilizer and nothing else for five years at least. That would be true economy, for the application of two thousand pounds of fertilizer, which is about the right ratio for an acre of land, would not cost nearly so much as fifteen cords of manure.

The question of the cost of manure eight miles from Boston was discussed by many speakers, and the price agreed upon by most of them was seven dollars per cord.

Mr. Derby, of Revere, struck the key-note to the situation on his remarks. He said, circumstances alters cases, different soils require different treatment. With him, upon his heavy, clayey soil, fall manuring not only improved the texture of the soil, but permitted it to dry out earlier in the spring.

Mr. Frost, of Belmont, related an interesting experiment with fertilizers on celery. Celery, where fertilizer was used, was far ahead of stable manure, as he experimented both ways. Mr. Frost's experience was doubly interesting, from the fact that he was formerly a skeptic on the use of commercial fertilizers on a market garden. He formerly said that there was nothing equal to stable manure. He further remarked that the market gardens of Arlington and Belmont were now manure sick, so much so that many of our valuable crops could not be grown.