

jection. But it is certainly an object to exceed rather than fall short of the mark, so as to leave none of the insoluble phosphate unacted on.

The above statement gives us the composition for the best article of "Super-Phosphate of Lime," and though it cannot be practically made in such a perfect manner as it is represented by the above numbers, it will, nevertheless, be the surest and most natural standard by which the quality of all fertilizers belonging to this class should be estimated.

Let us now see what Dr. Stewart says in his "Report of Analysis of a sample of C. B. DeBurg's Super-Phosphate of Lime." The following is a true copy of the published analysis, with an annexed recapitulation as given by him:

"Report of Analysis of a sample of 'C. B. DeBurg's Super Phosphate of Lime.'

February, 1854.

Proximate Analysis.

Water.....	16.40
Organic matter,	
Containing Ammonia.....	25.50
Ash.....	*58.10

Proximate Analysis of Above Ash.

Phosphoric acid.....	18.63
Lime.....	21.33
Magnesia.....	02.79
Insoluble residue.....	09.80
Salts, Potash and Soda, Sulphuric acid, &c.....	05.55

*58.10

Total proportion of manure soluble in fresh cold water was found to be twenty-eight (28) per cent.—of *this* nearly two parts were Phosphoric Acid, viz: *valuable elements soluble in water.*

Phosphoric acid.....	1.81
Potash of Soda.....	2.00
Volatile compounds, containing Ammonia.....	16.15
Sulphuric acid, Lime, Magnesia and other elements of less importance.....	08.04
	28.00

Recapitulation.

Total proportion (per cent.) of valuable elements in this "Chemical Manure"—3.75 or nearly four per cent. of Nitrogen, equal to 4.54 or nearly five per cent. of Ammonia; 18.63 or nearly nineteen per cent.