estimate. *Alkaline salts,* consisting chiefly of soda, are taken at £1 per ton; and potash at from £20 to £30, the former being the price at which it can be procured in Kelp. *Nitrate of soda* is at present sold at about £14 per ton, or if allowance be made for impurities, the price of the pure salt is about £15. Considerable difficulty attends the estimation of the value of soluble phosphates, because they are not met with in commerce alone or in any form except that of superphosphates, and the price at which they are sold in different varieties of that manure and by different manufacturers varies very greatly. The only course open to us is to endeavour to determine the average price and composition of good superphosphates, and putting the values already determined on all the other constituents, to reckon the difference between that sum and the *market price,* as the value of the soluble phosphates. I find that throwing out all the inferior samples, in those containing less than 10 per cent. of soluble phosphates, and taking the good only, the average composition of the superphosphates in the market during the present year has been:—

Water,	10.71
Organic matter,	9.33
Biphosphate of lime, equivalent to 19.43 soluble phosphates,	12.45
Insoluble phosphates,	14.78
Sulphates of lime,	45.24
Alkaline salts,	2.11
Sand,	5.38
	100.00
Ammonia,	1.71

It is more difficult to determine the average price at which the manure is sold, but the samples analysed included manures at all prices from £7 per ton up to £10 and in some cases even £10 10s. On the whole it may be assumed that the average price is about £8, and if so, soluble phosphates are sold at £27 19s. per ton. If the inferior samples had been included so as to give one general average, the price would have been still higher. The usual price at which they are estimated is £30 per ton, and £46 16s. for biphosphate of lime, although occasionally the former has been reckoned as low as £25, with a *corresponding* rate for the latter. All these prices are liable to fluctuation according to the state of the market, and they ought to be varied at different times; but it is obvious that the farmer cannot watch the changes of price so as to do this, and it is much more convenient and safer to adopt a fixed average which can be used for the comparison of different manures. Indeed, if absolute precision were to be aimed at it would be necessary to vary these estimates in different localities, and to some extent also according to the kind of manure. This is particularly the case in regard to the price of soluble phosphates, which is actually fixed by the manufacturers of superphosphates, and in this respect very remarkable differences are observed, for in superphosphates made from bones it is by no means uncommon to find soluble phosphates sold as high as £40 per while in those made from bone ash and their price sometimes does not exceed £20. the same way we find that in soluble phosph which in bones and bone ash are sold for £7 per ton, cost £10 in phosphated guano that a different value must be establishe these substances in their different condition may, indeed, be alleged that no such diffe is admissable, and that the lowest price s in all cases be assumed; but on the other it must be observed that the whole obj adopting a system of valuation at all is means of deducing the market price of t ticle and the values used when applied average sample must bring out the ar price. Hence when a farmer buys a phos guano at such a price as gives £10 per t the phosphates, we are not entitled to s he has paid too dear, and that he ought t got them at £7 per ton, the rate at whic are purchased in bones. On the contra are bound to assume that he would n paid this price for them unless he foun his advantage, and to make it the basis valuation. It is sufficiently obvious th values of the different substances conta manures being a matter of deduction, c able differences must exist in the values a to them by different individuals, and w fore give a table shewing the values per adopted by different analysis:—

	Way. £. s.	Voelcker. £. s.	Nesbit. £. s.	Hodg £.
Ammonia.....	56 0	60 0	60 0	56
Insoluble phosphates	7 0	10 0	8 0	7
Do. in phosphatic guanos..	7 0	10 0	8 0	7
Soluble phosphates	32 13	30 0	24 0	25
Biphosphate of lime	50 3	46 16	37 8	39
Alkaline salts.	1 0	1 5	1 0	1
Sulphate of lime	1 0	1 5	1 0	1
Potash.....	30 16	—	—	20
Nitrate of soda	—	20 0	—	-
Organic matter	1 0	1 0	1 0	1

The practical application of these valu simple, and will be readily understood examples. Let us suppose a sample phosphates to contain—

Water	
Organic matter	
Biphosphate of lime equivalent t 14.88 soluble phosphates	
Insoluble phosphates	
Sulphate of lime	
Alkaline salts	
Sand	
Ammonia	