No. 1 is satisfactory value at \$32.00 per ton, while No. 2, although offered at a lower price, is still \$6.24 above the actual value.

Many farmers make the mistake of assuming that a manure of a low price is economical. This, however, is not necessarily the case; indeed, it is usually found that the high-grade manures are in reality the cheaper when valued according to their composition.

## UNIT VALUES.

In making a valuation of any fertilizer it should be thoroughly understood that the unit prices for Nitrogen, Phosphoric acid and Potash are based entirely on the market values of the raw fertilizers supplying but one of these plant food elements. These unit values may vary in the different raw fertilizers according to their percentage, composition and price, as follows:---

## UNIT VALUES OF NITROGEN.

	+ Dules		% Nitrogen	Pr	lce	Condition or kind of
	TPrice		or Units of	per u	III. UL	Mitanes
Fertilizer	per tor	n.	Nitrogen in one ton.	NILL	ogen.	Nitrogen.
Nitrate of Soda	\$55 00	0	15	\$3	66	Nitrate
Sulphate of Ammonia	70 00	)	19	3	68	Ammonia
Calcium Cyanamid	48 00	0	15	3	20	Organic
Dried Blood Meal	55 00	0	11	5	00	Organic

The unit value of organic nitrogen may be obtained from other manures such as Meat Meal and Tankage, which are sold chiefly for their nitrogen content. One per cent. ammonia is equivalent to four-fifths of one per cent. of nitrogen. Thus, if the nitrogen is stated as per cent. of ammonia, to convert to per cent. nitrogen multiply by 4-5, or more accurately .823.

## UNIT VALUES OF SOLUBLE OR AVAILABLE\* PHOSPHORIC ACID.

		Price per unit of Conditions			
Fertilizer. Superphosphate	<pre>†Price per ton . \$16 00 . 18 00</pre>	% Phosphoric acid, or units, in one ton. 16 12	phosphoric acid. \$1 00 1 50	or kind of phosphoric acid. Acid Basic or	
				Alkali	

## UNIT VALUE OF INSOLUBLE OR SLOWLY AVAILABLE PHOSPHORIC ACID.

A unit value for insoluble phosphate in the organic form can be obtained from the price of bone meal containing 2.5 per cent., or units of nitrogen, and 23 per cent. or units of insoluble phosphoric acid, at \$30.00 per ton. 2.5 units of nitrogen at the highest unit value (in the organic form) would be \$3.68 per unit = \$9.20. Subtracting this from \$30.00 (\$30.00-\$9.20) = \$20.80 for 23 units of Phosphoric acid; = 90 cents per unit of insoluble organic phosphoric acid.

The market price of Ground Rock Phosphate would establish a unit value for insoluble mineral phosphate which has not been treated with strong acid. Though this kind of phosphate is a popular fertilizer in some places, as yet it is rarely used in Ontario and the price is soldom quoted at present.

\* By available phosphoric acid is meant that which is soluble in water or very weak acid. In the case of a phosphato fertilizer which has been treated with very strong acid the phosphate which remains insoluble is considered of little or no value.