

his land, in one year, he makes a luxuriant crop, by the use of guano, the next year by the use of a different specimen, even at the *same price*, he may make a very inferior crop. Guano, therefore, has a relative value in relation to particular soils, as it can supply them with a greater or less proportion of their deficiencies; it has an absolute value depending on the quantity of ammonia which is already, or can be formed in it, and on its phosphates. Most clearly and unquestionably, then, its inspection should show the proportion of each of these constituents, so as to show its absolute worth, and its relative value to different soils. When a farmer is buying guano, let him know how much of each valuable substance he may be purchasing, then he will not be spending his money without knowing what he is getting for it, and can better suit his guano to his particular soil. The proportion of the two valuable substances is very variable, and yet the guano, at present, has but two, or, at most, three grades of value.

To show the quantity of valuable matter which we have a right to expect in genuine Peruvian Guano, I here annex the analysis of eight specimens of Guano made by Way, of London, whose skill and accuracy as an analyst has been endorsed by the highest chemical authority in Europe, Baron Liebig.

*Peruvian Guano imported in 1847—8.*

Number of Specimen,	1	2	3	4	5	6	7	8
Name of Ship, . . .	"Agamemnon."	"General Alaix."	"Manchester."	"Queen of the Isles."	"Director."	"Othello."	"Parkfield."	"Ospray."
Water, . . . . .	16.16	17.29	8.88	22.68	17.95	16.72	12.57	15.85
Organic Matter and } Salts of Ammonia, }	57.13	50.66	58.82	44.19	51.39	51.35	37.78	55.28
Sand, . . . . .	1.17	1.64	1.36	1.22	1.34	1.58	1.72	1.23
Earthy Phosphates,	19.46	23.07	25.27	28.83	20.98	29.74	34.45	20.30
Alkaline Salts, . . .	6.08	7.34	5.67	3.08	8.34	.61	13.48	7.34
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Ammonia supplied } by 100 parts of } each specimen, }	18.94	17.46	17.86	16.83	18.01	16.40	18.50	16.92

These show what genuine Peruvian Guano *ought* to be. How far they correspond with what has been sold in our market, let a comparison with those which I shall hereafter give show. I now give three others from the same authority, of which he says:—"The next analyses are samples of those sold to different persons as genuine Peruvian Guano, but which are so low in ammoniacal composition as to lead to a doubt of their genuineness.