

of the Guano with sufficient accuracy to protect the planter and farmer.

There is another article under the name of "El Roque Guano," which is not entitled to the name of Guano, it being a mineral product and not the excrement of birds or other animals, it is not a phosphate of lime such as is found in Bones, Mexican and Columbian Guano, but a phosphate of iron and alumina, somewhat similar in composition to the deposits of blue earth found in the neighborhood of Still Pond, in Kent County, in Worcester County, on the farms of Dr. Watkins, J. T. Hodges, Esq., Hon. J. S. Sellman in A. A. Co., and on the farms of J. Mulliken, Mr. Berry and others in Prince George's County; and is worth no more than the said blue earth, (vivianite,) when existing in a state of purity; farmers will not be induced by its name to purchase it, for it is a false one. Unless the above advice is followed they are constantly liable to the grossest imposition in the purchase of Mexican, Columbian and other phosphatic guanos, more so in these than in Peruvian, the former are brought here by various individuals, few of whom know the difference between a good and a bad article, and the knowledge on the part of the purchaser is not increased by the inspection laws, as I shall show when making some recommendations as to their revision.

The proper quantity of phosphate of lime per acre is that contained in about five bushels of bone dust, two hundred and fifty pounds of phosphatic guano, which should contain about fifty per cent. of phosphate of lime or about two hundred pounds of a *veritable* superphosphate of lime. These are not exactly equivalent numbers, but sufficiently near so for practical purposes.

*Mode of Application—Soils and Crops to which it should be applied.*—The best mode of application in order to receive the full benefit of phosphate of lime in the form of bone dust, or the phosphatic guanos, is to apply it broad-cast at the time of sowing wheat, or to the land when it is prepared for the planting of corn, tobacco, cabbage, &c. Manures of this class are not so immediately forcing as Peruvian Guano, but they act on the plant at a later period of its growth, whilst the leaves, stalk and grains are in the process of formation. At this time the roots of the plants have entered far and wide into the ground, and the phosphate of lime should be equally diffused through the land in order to be taken up by them and introduced in the body of the plant. This diffusion cannot take place but to a very limited extent when phosphatic manures are put in the hill or used with a drill.