

an acre is 300 bushels ; which of No. 2 contains 2,000 pounds of *phosphate of lime*.

By reference to the tables of analyses of phosphatic guanoes in a subsequent chapter, it will be seen that the kinds most in esteem may be estimated to contain about 80 per cent. of phosphate of lime. The usual application of these per acre is 300 pounds, containing 240 pounds of phosphate of lime.

Now, 3,600 pounds or 36 bushels of the above No. 2, marl also contains 240 pounds of phosphate of lime, and it would (even if the lime be not taken into the account) to be as effective for its phosphoric acid as 300 pounds of Colombian, Sombrero, or the best of the Mexican and other good phosphatic guanoes. In addition, however, the 36 bushels of marl would supply the soil with 26 per cent., or more than 10 bushels of carbonate of lime to the acre. But we could not expect an equally good effect unless the marl be ground so as to be applied in as fine a powder as the guano.

The grinding, however, would prove too costly, and it will be doubtless better to avoid that expense, especially as we can attain our purpose by using the marl in the larger doses usually applied.

This will contain 2,000 pounds of phosphate of lime, which is the amount in 2,500 pounds of the best phosphatic guanoes, costing from \$28 to \$30 per ton of 2,240 pounds ; and will supply both the phosphate and carbonate of lime required for many years.

Mr. Kerr pointed out a portion of a field upon which this marl had been applied forty years ago, and no manure since ; and yet its good effects are still clearly perceptible.

It is believed that no marl with 25 per cent. of shells contains less than 1 per cent. of phosphoric acid, and analysis shows it to range from this proportion to that from Mr. Kerr's farm so rich in phosphate of lime. We find, therefore, with as little as 1 per cent. that 300 bushels contain as much phosphate of lime as 375 pounds of the best phosphatic guano.

The greatly increased productiveness of the soils of Talbot and other Eastern Shore counties is in a great measure owing to the extensive application of marl. Of late years, however, much lime has been used under the supposition that it would answer every purpose as well as the marl ; and as some gentlemen told me, "it was less troublesome."

The fashion, however, is destined again to change, and the marl to assume its proper rank in the agricultural system of the tide-water counties.

Some who have neglected it for several years for the use of lime informed me that they intended to reopen their marl pits this winter, and to use this valuable manure liberally.

Among others, Judge W. B. Carmichael, whose father was among the first that extensively used marl in Queen Anne's