marls, I was anxious to secure specimens from as many marl pits as possible, with a view for repeating the analyses for the purpose of determining the proportion of phosphoric acid, but it not being the season for digging I was unable to obtain such as I thought would represent the average of each bed.

For this purpose it is proper to take the samples from the face of a freshly made excavation by cutting out an equal thickness from the top to the bottom of the pit, in several places; and then after mixing the whole thoroughly, take out a portion for the sample to be analyzed.

Several gentlemen promised to procure me samples during the winter, when they intended to get out marl for their lands.

In order that the whole subject of these marls may be fully examined, I would suggest that the work would be materially aided if every one who works a marl pit, during this season, will carefully select a large sample in the manner above described, and also a number of specimens of each kind of shell, tooth, bone or other fossil they may meet with, and after *carefully* packing, send them to me at No. 73 Smith's wharf, or to No. 19 McCulloh street. The locality from whence they came and the name of the sender should always be distinctly stated.

I selected, in person, two samples for analyses from the lands of David Kerr, Esq., situated on both sides of Island creek, an affluent of the Treadhaven creek, in Talbot county.

The results are as follows:

	No. 1.	No. 2.
Carbonate of lime	26.52	26.13
Phosphate of lime	2.90	6.67
Iron, magnesia, water, and organic matters .	3.07	11.62
Sand and earth	67.51	55.58

The carbonate of lime in both these marls, especially the last, appears to be derived principally from coral, the remains of which are abundant.

The second is remarkable for the large proportion of phosphoric acid it contains, which, independant of the lime, must constitute it a valuable manure, as will be seen by comparing it with the phosphatic guanoes, whose value in money is known.

The weight of one bushel of marl is usually estimated to be 100 pounds, which in the coral marl No. 2 contains $6\frac{2}{3}$ pounds of phosphate of lime. The usual quantity applied to