

Joseph Forest, Esq., situated on the west bank of the Patuxent river, about fifteen miles above its mouth. In both of these localities there are unlimited supplies of marl, one-half or more of which is probably carbonate of lime, and it could be delivered on board of vessels (if proper arrangements be made) at very small cost.

If some of those, whose enterprise and energy have so much contributed to furnish the immense quantities of lime used in our tide-water districts, would turn their attention to getting out and selling these marls, their exertions could not fail to be very soon properly appreciated and rewarded. Our shell marls are, in my opinion, *worth more* than the Jersey green sand, which is purchased by farmers residing at points distant from the pits, at a cost (including transportation) of 10 to 12 cents per bushel. It has, in fact, a commercial value, and is exported by railroads as well as by water, to the adjacent parts of Pennsylvania and New York.

If a large trade could be sustained in our marls, it could be taken out at a very low cost by means of the steam excavators, one of which proved so efficient in opening and grading the Northern Avenue, in Baltimore, a few years since.

There is some difficulty in making a comparative estimate of the value of marl, and the lime now supplied to our tide-water districts.

The different varieties of lime we get, when *not slaked*, contains from 35 to 75 per cent. of pure lime, the balance being made up of sand, magnesia, oxide of iron and alumina. If the lime be slaked or long exposed, the proportion of pure lime will be much less, because of the water and carbonic acid absorbed. It will probably be fair to assume (if we regard only the lime) that one bushel of lime will contain as much as $2\frac{1}{2}$ bushels of good marl, and to the latter we should add the value of the phosphoric acid, which should be applied to all soils long in cultivation.

This subject is of paramount importance to our agricultural community, and consequently to the State at large, and I regret that in arranging my programme of duties, more time could not be allotted to it. Whilst I have been able to present some of its interesting features, there are abundant incentives to pursue the study in a thorough manner. In addition to the lime in our marls, the phosphoric acid assumes much importance. As it exists in every shell, and is subject to chemical solutions and depositions, it is, under known natural laws, carried away from certain points and deposited in others.

It is also liable to occur in certain localities from other causes, of which I am reminded by the occurrence of the