

known during our examinations of the past year. A transient inspection of these deposits led to suspect that at a greater depth, their contents would be found more valuable—inasmuch as they might be expected to yield a larger quantity of fossil shells, which by their disintegration would increase the proportion of calcareous particles. This conjecture has been verified by the subsequent researches of Capt. Walter D. Miller on Ward's branch in Nanjemoy. An immense agricultural resource is thus shown to be at hand for the benefit of this portion of the state, of which the intelligent planters of this district, in Charles county, will certainly lose no time in taking advantage. The places at which it has been so far discovered, are the heads of the small branches making into the south side of the Mattawoman, on the plantations of William Dulany, Esq. and Mr. John Pye; at the heads of similar branches emptying into the Nanjemoy, on the estate of Capt. Alexander Gray; and at Port Tobacco. It may confidently be looked for at the head of all the deep ravines that furrow the highlands, to discharge their waters into the Potomac or its creeks.

From the nature of this *Blue-marl*, and the condition of the soil belonging to the hilly lands in this section of Charles county—deprived in a great measure, by washing, of their natural soil—it is believed that small applications—say of ten loads, or one hundred bushels to the acre, aided by a few loads of stable manure, and repeated to a given extent at intervals of four or five years in proportion to the progress of improvement in the soil,—would be very profitable. Such soils, moreover, as are apt to wash, will by this operation have their texture greatly improved, and will be found much less liable to run into gullies. An important observation related by Mr. Ruffin is that “when a field that has been injured by washing, is *marled*, within a few years after, many of the old gullies will begin to produce vegetation, and show a soil gradually forming from the dead vegetables brought there by the wind and rains, although no means should be used to aid this operation.”

The next variety of marl to be described as appertaining to Charles county, is perhaps the most valuable material of this kind which the state possesses. It has