at Mr. Brent's and Mr. Digges's, groupes of crystalized selenite, or gypsum, are found in the green marl; but as they occur always in the upper portions of the deposite, at a uniform elevation, and as it were in a continuous stratum, (the marl being covered with a thick coat of ferruginous sand and gravel containing iron pyrites,) it is presumed that the selenite is only an accidental constituent of the *Green marl* of these localities, produced by the decomposition of the pyrites and the action of the resulting acid upon the lime of the marl beneath. A similar formation of selenite, was described in the former report as observed in the shell-marl deposite at the mouth of St. Inigo's creek, on the St. Mary's, and this, as previously stated, does not belong to the green-sand formation. The phosphoric odor recognized by Professor Rogers in the marls of New Jersey, was not perceived in ours. But the foregoing points of similitude are sufficient to identify the deposites on the Potomac with the green sands of New Jersey and Virginia. On the other hand, a very usual accompaniment of the green marls of Charles county, is that of spheroidal masses of indurated marl, in shape resembling a gourd—whence they are sometimes called by the uninformed petrified gourds—and varying in size from the larger to the smaller kinds of this vegetable production. Some of these masses present when broken a nucleus apparently of the same nature as its envelope; others exhibit irregular cavities lined with an incrustation of a straw colored carbonate of lime, having the lustre of imperfectly bleached bees wax. Such is the character of these masses on the plantation of G. Brent, Esq. On St. Thomas' Manor, they more resemble irregularly shaped nodules, traversed by fissures, the sides of which are lined with selenite.

Below Pope's creek, at Cliffton—a situation which was indicated by Col. Wm. D. Merrick, and visited in company with this gentleman and the owner, Mr. Latimer—there is an immense deposite of a *Blue-marl* exceedingly rich in calcareous matter, and containing moreover a notable proportion of the green sand. The analysis of this marl is given at No. 57, of the table. The bed of marl now referred to is elevated from thirty to fifty feet above high tide, and is covered by a stratum of diluvial gravel from ten to twenty feet in depth. It is decidedly one of the most important deposites of marl hitherto discovered on either shore of the Chesapeake bay. Whenever the value of its contents shall be duly appreciated it will prove the source of re-