

many miles from their mouths,) occasion much loss of time in going around them, more especially as the want of roads along the shores would make it necessary to do this part of the land-work on foot.

The proper plan, therefore, is to make use of transportation by water along the shores of the bay and rivers, in order that the out-cropping edges of the various strata can be investigated and no time be lost in passing from one point of observation to another.

With these difficulties in the way, and there being no means provided by the State for hiring boats, I endeavored, nearly two years since, to avail of the use of the U. S. revenue cutter cruising in this district. I learned from her commander, Capt. Sands, whose principal duty was cruising in our bay and rivers, that he could convey me along them without the least interference with his routine of duty.

An application was made to the late Collector of Baltimore for permission "to take passage on board the cutter without expense to the United States whilst she is [was] engaged in her *ordinary duties*, with the privilege of landing along the shores to facilitate our geological survey." The Collector thought proper to refer my letter to the then Secretary of the Treasury, Mr. Cobb, who declined the request upon the ground that as "the law prescribed the duty of the cutters, it was out of the power of the department to order her upon any other service." I did not ask him to *order her on any other service*, as will be seen from the above extract. I have not read the law, but I know that when Agassiz was investigating the Zoology of the coast of South Carolina and Georgia his labors were greatly facilitated by being transported about by the revenue cutters. This was a proper occasion for facilitating a good enterprise for the public good, but whether it was legal and equally proper at sundry times to *order* cutters to take parties of pleasure about, which has often been done, is certainly questionable.

Failing in this mode of investigating the strata in the lower counties, they were examined at as many points as possible by means of the less satisfactory mode of land travel. In this I was aided frequently by the kindness of private gentlemen. A satisfactory examination was made of a portion of the banks of the Patuxent. One of the results of this was the discovery of the important bed of tripoli, to be noticed in a subsequent page.

Similar aid was afforded in examining the formations near Port Tobacco river, Pope's Creek, and the adjacent parts of the Potomac. I had intended to have made another effort for the privilege of taking passage on board a U. S. revenue vessel upon the retirement of the late official but for the breaking out of the war.