

etor dug a few feet deeper into the green sand, which, as I had predicted, contained much less common sand than near the upper part of the bed.

It was also noticed, on the Prince George's side of the Patuxent, at several places, at one of which (the farm of Charles C. Hill, Esq.,) a cretaceous fossil, a cucullea, was exposed in the farm ditches.

It is again exposed in a ravine upon the lands of R. W. Brooke, Esq., in the same county, near the southern corner of the District of Columbia, and about three miles east of the Anacostia bridge, over the eastern branch.

Mr. Brooke found a decidedly good effect produced by the application of *only sixty or seventy bushels* to the acre on a portion of his cornfield. The upper four or five feet of the bed was exposed and had doubtless lost much of its lime and potash. Upon being analysed it was found to contain

Carbonate of lime,	26.5	containing lime	14.9
“ magnesia,	2.7	“ magnesia	1.4
Silicates of alumina,	} 25.4	“ potash	1.3
iron and potash,			
Sand,	42.4		
Water,	2.		

The proprietor promised to dig into it at a point further down the ravine, so as to reach the lower part of the bed, but upon calling there seven months after my first visit, I regretted to learn that owing to indisposition in his family, no further progress had been made. It is to be hoped that it will be more fully opened, so as to give access to the purer material which may be expected below. Even that now accessible will doubtless prove a valuable manure, especially for the stiff soils of the cretaceous clays which range immediately on the northwest of it.

The result of my preliminary survey of this formation leads to the conclusion—

1st. That the lower green sand rests upon the southern edges of the cretaceous and iron ore clays (21 and 22) and ranges from the last named locality to near the mouth of the Patapsco, on the Western Shore.

2d. That its upper limits rarely rise many feet above the level of tide-water and frequently do not reach that elevation.

3d. It is usually overlaid by the red sandstone and ferruginous and other sands before noticed, so that it is only visible in the banks of ravines and other low situations.

4th. The inequalities of stratification and the thickness of the superincumbent beds are such, that to the present time, the