

largely used with manifest advantage by farmers in that region. The upper surface of the marl being but a few feet above tide-water, renders the working of the pits frequently troublesome. A careful survey of that district is requisite.

The proportion of green particles is not large, but it abounds it with fossils shells, so that its principal value depends upon the carbonate and phosphate of lime, and a small proportion of silicate of potash. The silicate of iron is not also without its use.

My anxiety to aid in developing the green sand range in Anne Arundel and Prince George's counties, induced me to spend as much time as was consistent with other duties, in exploring that district. I found difficulties in the way, (owing to the distribution of the strata,) which must be overcome by a laborious and careful survey.

I had hoped to have gained some knowledge of the stratification of the region, from the results obtained by boring the artesian well at the Annapolis Naval School, but upon inquiry was surprised to find no record had been kept of the strata.

In the appropriation for improvement of the State House, made during the last session of the Legislature, a provision was made for an artesian well in the State House yard. I looked with great interest upon that branch of the work, because, in addition to the full supply of water, so much needed for the protection of the building from fire, it would have given a geological section of great importance. It was with much regret, therefore, I learned that the appropriation was insufficient, and that the well was not even commenced.

In making a survey, on foot along the line of the Annapolis railroad, I noticed the red sandstones, with the irregular sandy limestone beneath it, near Crownsville, as they appear in New Jersey and in Cecil county, and also beneath these a bed of dark blue sandy clay, at about sixty-five feet above tide-water. As the green sand was to be expected next below this, I visited Round Bay under the hope that I should find it cropping out at some of the bluffs upon its borders. But, to my surprise, it appeared that the strata dipped downward in that direction so that the blue sandy clay, seen on the railroad, presented itself but a few feet above tide-water on Round Bay.

I noticed the same clay at other points southwestward, and on the farm of Richard Hopkins, Esq., near the head of South river, it was seen (with the sandy limestone containing shells) resting upon green sand mixed up with common quartz, sand and shells. The shells were so tender that it was not possible to collect a sufficient number to characterize, with certainty, the age of the formation. Since my visit, the propri-