

stance in the air of malarious districts; but it shows us that late in summer the water in shallow wells in low districts of country abounds with unwholesome matters.

A well was commenced by my friend, Dr. R. S. Stewart, at Dodon, in Anne Arundel county, but, owing, I presume, to a want of skill in the contractor, "it got a twist," as they call it, at a considerable depth, which, of course, arrested further operations. This is much to be regretted, on account of its enterprising proprietor, as well as the public. But for this untoward result, the well would have been continued, so as to bring to or near the surface an abundance of good water, and it would have given information highly useful to those residing upon the same geological formations.

The present state of our knowledge leads to the conclusion that there is a general southeasterly dip in our formations as indicated in the sections. Consequently artesian wells must be deeper in proportion as we proceed southward and eastward. It is to be hoped that an important addition to our knowledge in this regard, will be furnished by the completion of the 8 inch well at Centerville, in Queen Anne's county.

I regret that here as at the Naval School, an accurate record of the strata was not preserved. I am promised, however, that when the boring shall be resumed, such a record as well as samples of the borings will be furnished me.

From what I saw of these remaining, although much mixed together, I concluded that the cretaceous green sand or Jersey marl had been reached, and penetrated for some depth. This rarely produces good water which, however, we are certain to reach in the sands and clays beneath.

We are yet without information in reference to Artesian wells in the southern counties on both shores. Private individuals are unwilling to attempt such wells with a prospect of being obliged to sink them to a considerable depth. If each of these counties will follow the example of Queen Anne's and sink *effective* wells in their county towns, we should collect a map of facts of great value to all the tide water counties. The cost of sinking artesian wells in the west, through limestones, sandstone shales and other rocks, in search of salt water, appears to be less than is charged for those in our clays and sands. Drilling is necessary in rock, but in the clays the boring tool is in the shape of a large corkscrew which fits inside the pipe or tube. The screw enters the beds by being turned by men or by steam, and the tube is forced down with the aid of heavy levers. If the higher charges here be owing to less competition among contractors, the difficulty will soon cure itself.