

cessary to reply to many inquiries, verbally and by letters to our citizens.

To aid in forming a correct idea of the agricultural and other industrial capabilities of our State, a geological map is an essential requisite, but none such had hitherto been constructed, and I have felt it incumbent on me to commence the construction of one. The first difficulty in the way appeared to be the want of a correct geographical map.

To supply this deficiency as far as possible, I have collected all the useful data within my reach. A large map has been constructed under my supervision by Mr. August Faul, who has executed the work with great fidelity.

I was obligingly furnished by J. H. Alexander, LL.D., with the large manuscript map constructed by him whilst State Topographical Engineer, some twenty years since. This is altogether superior to any published map; but the labors of the U. S. Coast Survey had not then made progress in Maryland, and it was impossible to give the shore lines within the tidal districts correctly, as has since been done under the able direction of Prof. Bache.

I am indebted to the last named gentleman for his large charts of the Chesapeake Bay, and for other charts which enabled us to delineate the shore lines accurately.

There have also been published within a few years, a number of county maps from which, as well as railroad surveys, I have derived much information. To Mr. Martinet I am indebted for the use of his manuscript maps of Howard and Kent counties, which he is about to publish.

Capt. Thos. J. Lee, of the Maryland and Virginia boundary commission, has kindly aided in determining the position on the map of the northeast corner of the State, about which there was much difficulty.

Upon this map it is proposed to place the geological features of our territory, as they can be accurately determined.

The scale of the map is 1 to 200,000, equal to .3168 inch, or rather over 5-16 of an inch to the mile. It is, therefore, of suitable size for placing the final geological results.

An inspection of this map will show that it is infinitely in advance of any existing map of our State. It is, in fact, the best that can be construed out of the materials we possess at this time, whether published or in manuscript. It must, therefore, suffice for our geological purposes until we can have a complete survey of the entire State.

I ask the privilege to suggest the present as a suitable time for authorizing the commencement of a full and complete survey of those parts of the State not covered by the operations of the U. S. Coast Survey. Prof. Bache and his able corps of assistants have nearly completed their work within our limits in the most accurate manner. If Maryland will author-