

INVESTIGATIONS CONDUCTED BY THE STATE AGRICULTURAL CHEMISTS,  
1848-1862.

By an act<sup>1</sup> of Assembly passed in March, 1848, the Governor of the state was authorized to appoint a State Agricultural Chemist, whose duty it was "to analyze specimens of every variety of soil of the county in which he shall be that may be brought to him or that he may find to exist, and also to examine, and if necessary analyze, specimens of every kind of marl or other mineral or vegetable deposits that may come to his knowledge," and also "to deliver one public lecture after having given timely notice in each election district in each county and then to deliver a course of public lectures at each county town."

Dr. James Higgins was appointed the first State Agricultural Chemist, his term of office extending from 1848 to 1858, when he was succeeded by Mr. Philip T. Tyson, who continued in office until the repeal of the act in 1862.<sup>2</sup>

The work of Dr. Higgins possessed little of scientific interest. He published six reports between the years 1850-58, in which numerous analyses of soils, marls and other substances are found, but the work was intended to be of more immediately practical than scientific value.

Mr. Tyson was deeply interested in the geological problems connected with his work as State Agricultural Chemist, and in his first report, published in 1860, prepared a geological map of the state on the scale of 12 miles to an inch, that was by far the most complete representation of Maryland's geology that had been attempted up to that time. It was the first detailed geological map of the entire state. More fully perhaps than any one else at that period, he recognized the fact that geological investigations were essential to any proper interpretation of the soils of the state, and accordingly did much to classify and describe the several geological formations. He says:

In the present day there are perhaps few who will refuse their assent to the proposition, that the character of the industrial operations of every

<sup>1</sup> Laws of Maryland, 1847, Chap. 249, Maryland Code, 1860, Art. 17.

<sup>2</sup> Laws of Maryland, 1861-62, Chapter 73, passed Feb. 19, 1862.