

the Legislature of the state passed resolutions relative to a state map and a state geological survey, and the following year passed an act providing for the appointment both of a topographical engineer and a state geologist.

The United States Geological Survey, recognizing the importance of topographic maps, has, since it was established in 1879, been engaged in topographic surveys in different portions of the country, but, on account of the great areas which it has to cover and the necessary division of its work among the several states, is able to do but a small amount in each annually unless the state itself co-operates, or, through its own scientific activity, shows the necessity for increased attention. In the years which have passed since the organization of the U. S. Geological Survey considerable work has already been done within the limits of the state of Maryland, but it was not until the State Survey was organized and showed the necessity of pushing the surveys to completion that the national government has aggressively taken the matter up. As a result the state may confidently expect after a few years to obtain an accurate map of its territory. The completion of this map which will have been brought about through the exigencies of the State Geological Survey and intended primarily for its uses will be of immense advantage to the people of the state for all purposes of internal improvement, since it will afford the necessary information for engineering and military purposes, for the location of railroads, highways, water conduits, and for other public enterprises.

The topographic map will be published in sheets upon the scale of two miles to the inch and will be admirably adapted for the location of the several geological formations of the state, as well as for most other matters of public interest. The elevations will be represented by contour lines, so that the height of any point can be readily determined within a few feet.

#### THE DETERMINATION OF THE MAGNETIC CONDITIONS.

A thorough study of the magnetic conditions affecting that portion of the earth's crust within the borders of Maryland is also contemplated by the State Geological Survey. A magnetic survey involves