

the geological survey be discovered, and as far as conveniently may be, to indicate also, by reference to marginal notes or otherwise, their several natures, qualities and values, and for this purpose the geologist of the state shall keep him regularly advised of all important discoveries which he may make, and the material facts in relation thereto; and the said engineer shall report to the Legislature at the commencement of every session the progress he shall have made during the preceding year in the work assigned to him.

Sec. 6. *And be it enacted*, That for the purpose of facilitating and expediting the completion of the said map and geological survey of the state, the Governor and Council be and they are hereby authorized to allow and pay the accounts of said officers, for necessary contingent expenses, other than personal; so far as they may deem said accounts just, equitable and proper, to an amount not exceeding one thousand dollars in any one year.

Sec. 7. *And be it enacted*, That the officers to be appointed under and by virtue of this act, shall be subject to the orders of the Executive of the state, to make any surveys for canals, rail roads, or other works of internal improvement which the Legislature at any time direct to be made; *Provided nevertheless*, That this act shall expire at the termination of the next session of the General Assembly, unless the same shall be re-enacted by the next Legislature of this state.

During the first year of the survey the Topographical Engineer was hindered from carrying on his work upon the map of the state by the section of the bill which rendered it necessary for him to execute "a survey for canals, railroads or other works of internal improvement which the Legislature may at any time direct to be made," he having been ordered to co-operate immediately after his appointment with an engineer from Virginia and commissioners from Delaware in the location of a canal on the Atlantic borders of Worcester county. He however succeeded in perfecting a plan for extensive co-operation with Mr. Hassler, the Chief of the U. S. Coast and Geodetic Survey, in the conduct of the topographic survey of Maryland. "The object of the Topographical Engineer," as stated in an historical sketch prepared by Ducatel in 1839, "was to obtain the superintendence of Mr. Hassler in order to secure a guarantee of accuracy in the measurement of base lines and the determination of main points for future operations. He was by this arrangement, too, to be put in possession of tried instruments; and the work of course is to be completed with more despatch and at less expense than if left