

10th. In an answer to this interrogatory I would refer to my report on this route. I state that in my opinion such a canal can be constructed with due supply of water, and at the cost I have estimated.

11th. In my opinion it will—especially in conjunction, with the natural flow of streams into the reservoirs—I again refer to my report.

12th. There are not in our country, facts in relation to this subject, which can be fully relied on to decide this question, nor are there facts in any country to decide it with anything like mathematical accuracy—the results are not the same on the same area, or any part of the globe, so much do they vary from natural causes, climate, geological junction, position, &c. In England, Engineers differ in opinion on this question but not widely, each being governed by his own experience and observation, or his reasoning from analogy and the facts he can obtain, with reference to particular circumstances and localities. In my opinion the region of country under discussion, is remarkably well situated for collecting and storing the water which falls on its surface, into reservoirs. I therefore come to the conclusions I did in my report, on the data and assumptions therein made, with reference to the depth of reservoirs—viz: that one-half the annual rains can be stored into reservoirs, and that four-fifths of that quantity can be made available to feed a canal. I will here observe that the waste of water for evaporation is much greater in a shallow than in a deep reservoir, and of course the waste of water depends partly on the depth of the pools.

13th. The facts are set forth in my report.

14th. They are not;—few, if any, conclusive observations or experiments have, I believe, as yet been made in our county—the whole subject is comparatively new among us. American Engineers are yet compelled to rely on information from abroad on this subject.

15th. I have not been engaged in the actual construction of a canal—I was for many years engaged in making surveys for canals while in the service of the government, especially on the surveys over the Allegany mountains with reference to the practicability of the Chesapeake and Ohio Canal—I was also attached to the Board of Internal Improvement of the General Government, of which General Bernard was at the head, at the time he was framing his estimates and making his computations with reference to this canal. The subject of a supply of water is fully discussed in his report and that of Mr. Sullivan. In Gen. Bernard's report he allowed a waste for leakage, evaporation &c. on the summit and adjoining portions, of 62 feet per mile, per minute. I refer to bottom of page 16 of my report for facts.

16th. The reservoirs would not cover a large area of country, nor be attended with unusual expense in their construction. I consider the localities generally, very favorable.