

As far however as we understand the country, it appears that but a short time would be necessary to discover the impracticability of such a route if it be impracticable, while, should the difficult points first examined encourage more lengthened operations a whole season might well be consumed in understanding it.

HEIGHTS OF PROMINENT POINTS.

The heights given on the map in feet at various points along the top of these ridges will further illustrate their character. At Henry Griffith's the height is 624 feet; at Cracklinton 615 feet; above the proposed tunnel on the Rockville Ridge 528 feet; above the proposed tunnel on the Mechanicsville Ridge 492; and at Rockville 447. The previous surveys and report of Mr. Trimble were found of eminent use in pursuing these surveys. The route followed by Mr. Trimble has undoubtedly passed the Cracklinton Ridge at its narrowest point. There was much difference of opinion however with regard to the supply of water available at that crossing and as those who differed with Mr. Trimble, and who averred that the supply was not sufficient there, were gentlemen of considerable experience, particularly in reference to canals, we resolved to re-examine the ridge below in pursuit of a route which should if possible exhibit a supply of water large enough to meet the views of the most cautious, or we desire to know in the spirit of our instructions and without reference to cost, under what circumstances a supply of water (deduced from the largest data in regard to supply which previous reports had elicited) was available. The examination of the route by Griffith's was thus deferred: it was afterwards made, and having been a distinct operation is already more conveniently described under its proper head in another part of this report.

SURVEY OF THIS SEASON.

In pursuit of our object then we assumed for the sake of comparison the level of Mr. Trimble's summit as the commencement of a horizontal line which was traced on either side of the ridge already described from Henry Griffith's to Mechanicsville on the one side, and from Henry Griffith's as far as Rockville on the other; crossing the ridge at Rockville the same base was assumed and traced in the intervening valley of Rock Creek as far as necessary.

These horizontal lines when surveyed and delineated on paper exposed very clearly the character of the ridge in respect to width, and hence in reference to the best points of crossing. Under other circumstances we should have examined the ridge without the aid of instruments, with the view of avoiding the great labor of the process described, and throwing our force on those points which appeared to the eye most advantageous. But independent of the fact that the outline of the ridge is rather smooth in its general character and therefore not very appreciable by the eye, the repeated surveys which had been already made with reference to the same object did not seem to warrant any course referable merely to individual opinion and which