

ing these and particularly the extent of country which will be drained by them.

“Also the extent of feeder line required to conduct the water of the reservoirs into the summit pass. Also the character of the soil for the reservoirs, feeders and summit section, whether sandy, shistose, limestone, slaty, &c. that is, whether adapted to lose much or little by filtration.

“The streams should be carefully gauged, and as you will be there during our season of drought, your gaugings, although for a limited time, may be depended on.

“Your knowledge of the kind of duty committed to your care, and of the object in view, render further instructions unnecessary, except the single remark that your facts should be collected with sufficient care to justify a preliminary estimate of the probable cost, to the extent of the survey you may make.”

The section of country referred to in these instructions comprehends that portion of the Eastern slope of the great Parr's Ridge, drained by the head waters of the Seneca and the Patuxent Rivers. The Parr's Ridge itself, which forms the most marked feature of this portion of Maryland, divides the waters of the Monocacy (a branch of the Potomac) from the various streams, those mentioned among others, which flow either into the Potomac below the Monocacy, or into the Chesapeake Bay at and below Baltimore. This extensive leading ridge pursues a course about N. E. towards the Susquehanna River. The Eastern slope with which we have to do now, broken by the various streams which take their rise there, exhibits a succession of lateral or secondary ridges and corresponding vallies, of which the one developed by the surveys of this season is situated directly across the route of the proposed canal and forms the great obstacle to its economical execution.

The Parrs Ridge maintains an average elevation of 850 feet above tide. At the point of crossing of the Linganore Route, elsewhere described, its elevation is 770 feet above tide.

Of the secondary ridges above referred to, the one which interferes with the Seneca Route of the Maryland Canal, is that lateral ridge which diverging from the main ridge at Damascus pursues nearly a S. E. course to Henry Griffith's, a point already well known and referred to frequently in Mr. Trimble's report, as exhibiting that very narrow portion of this ridge which Mr. Trimble proposed taking advantage of for his canal route.

On this distance it directly divides the waters of the Patuxent River from the head waters of the Seneca. At Henry Griffith's a considerable spur of this ridge separates, continuing the course of S. E. while the main ridge deflects with nearly a southerly course to Cracklinton, a further distance of about four miles. The spur above referred to is termed the Unity Ridge and divides the waters of Hawlings River from those of the Patuxent. The Hawlings River, however is a tributary of the Patuxent, and the spur is only