

## MONOCACY SURVEY.

J. P. Ingle, esq., Clerk

Chesapeake and Ohio Canal Company.

Dear Sir,—I communicate to you, for the use of the Chesapeake and Ohio Canal Company, a general outline of the Monocacy Survey, for a feeder and a continued canal through the city of Frederick to a point on that river near Creagerstown.

Commencing at the mouth of the Monocacy on its right bank, the line of feeder passes along mostly steep side-lying ground, requiring in several places the bank to be placed in the bed of the stream, and a protecting slope wall against its floods. About three miles from the Potomac, the line skirts along the intersection of the flats with the upland, and is more generally favorable. The level of the feeder at M. Pherson's Mill, four miles from the Potomac, is over thirteen feet above the surface of mill dam.

Immediately above this mill, for half a mile, a rocky bluff is encountered; passing which, and continuing northward, the ground is pretty favorable to Buckey's Mill, having only to pass a little more than a mile of river bluff, where the face of the rock must be cut off, and the bank placed in the river.

At the surface of Buckey's mill pond, the level, allowing two feet descent to the Chesapeake and Ohio Canal, on the surface of the feeder, runs out; consequently, this valuable establishment would be destroyed by placing a dam below it. The feeder must therefore be prolonged to this place, when it can easily be taken out without injury to the mill.

Connecting the feeder, as is proposed, with a canal to be continued to Creagerstown on the Monocacy, the best plan perhaps would be to take the water out of the river just above the Georgetown road, 16 feet above surface of feeder, below Buckey's mill. This elevation may be preserved to a point near said mill; here it may be connected with the lower level by two locks of eight feet lift each. The water for the supply of this mill may be drawn from above the locks, and used on overshot wheels of 14 feet diameter, using the feeder which should pass through the foundation of the building, for the tail race. On this plan, the whole of the Monocacy may be used for milling and manufacturing purposes, under a head