

the "high level;"—there is however a subordinate error in the location of the present guard lock, to which I shall hereafter refer: and it may perhaps be as well to observe that in no part of this report is it my intention to reflect upon any individual;—I merely aim to fulfil a professional duty fearlessly, and with candour.

The able engineers in the service of the United States when they planned the Chesapeake and Ohio Canal, in this vicinity, judiciously assumed a level for the canal bottom of near 30 feet higher than that now adopted upon the present or "low level." This level was maintained from Cumberland to the Narrows of the North Branch, and necessarily placed the canal line throughout this distance, nearly upon the same ground now occupied by the Baltimore and Ohio Rail Road.

The advantages offered by the "high level" are:

- 1.—By throwing the canal north of Cumberland upon a gentle side slope of which the height of the level gave perfect command, an opportunity was afforded of forming a noble basin of any desirable extent.
- 2.—The basin thus formed would have been of most convenient access to rail roads descending Wills' creek, from the mines upon its tributaries.
- 3.—The town of Cumberland would not have been placed by the works, in a worse position than formerly, in regard to freshets, and therefore would not have needed any defensive arrangements.
- 4.—The canal would not have been driven to the faces of the river bluffs as it now is, near Hoye's mill, at Evitt's creek, and at another point, but would have passed over them with no very formidable cutting; neither would it have been thrown into dangerous proximity to the river as is now the case just below Evitt's creek, nor upon the abrupt slope of the second bottom as it is in several places; but it would have been every where above the narrows, laid upon safer, smoother, and generally upon cheaper ground.
- 5.—By cutting off the great bend, just above the narrows, it would have shortened the line near 3 miles—a matter of no small moment in competing with a rival work.

The disadvantage of the "high level," would have been its increased cost owing to a feeder being required from the north branch west of Cumberland, which however being made navi-