

3—ON THE CONDITION AND PROSPECTS OF THE FINISHED CANAL NOW NAVIGATED 134 MILES UPSTREAM FROM GEORGETOWN TO DAM NO. 6.

It is gratifying to be able to state that upon the finished part of the canal during the past year, breaches have been less frequent than heretofore; thus indicating that the stability of the Banks is gradually augmenting by time, and the continual strengthening of weak points by repair, as fast as they display themselves by leaks or breaches.

The 4th division, being the $27\frac{1}{2}$ miles next below dam No. 6 (with the exception of that work proving more leaky than was expected,) has during the past year fully sustained its reputation for fidelity of construction, the navigation for the time it was open, having like that of last year, remained entirely uninterrupted; it must however be remarked that this division has never yet been tested by a full head of water. The costly improvements upon this part of the line made during this year, at the pool four miles below Hancock, and in the limestone district near Prateas Neck, have (I understand) thus far answered the expectations which were formed of their utility.

The two extensive pools upon the 4th division, at Mrs. Bevans, 4 miles below Hancock, and at Fort Frederick below Licking Creek, especially the latter, will need additions to their embankments to enable them to carry safely 5 feet water; the banks should receive more internal base, be augmented in height, and armed upon their faces with a Riprap; the superintendent of the 4th division has been judiciously directing his attention to these points.

The necessity of elevating the Towpath Bank of the Fort Frederick Pool, and protecting its interior face with rock, will be gathered from a mere statement of the fact that it is about 2 miles long in a right line and 20 feet deep or more, giving manifestly both scope and depth enough to enable a heavy gale of wind to create a sea, which I apprehend deeply freighted canal boats will sometimes find it difficult to weather, these surges rushing with violence against the towpath, would evidently breach it very soon, if not provided with a suitable defence.

Every objection which can be properly urged against River Slackwater Pools, (except current) lies with much greater force against that at Fort Frederick, because the latter runs in a straight line and is therefore liable to be swept by gales