has been done upon it, and it terminates about half a mile above the lower end of the bottom.

By lock No. 59, of 8 feet lift, to which nothing has been done, we descend to the 58th level, whose length is 2 miles and 2,524 feet. This level, leaving the "7 Mile Bottom," lays along a side hill for near two miles, and then ends in a narrow bottom land. All of the heavy earth work, but no masonry

whatever, has been completed upon this level.

By lock No. 58, of 8 feet lift, which is scarcely begun, we drop down to the 57th level, which is 4 miles and 3,562 feet in length, and extending entirely around the bend of the river, opposite to Orleans. It crosses 15 Mile Creek, by aqueduct No. 9, of 50 feet span and 10 feet rise, which is ready to receive its arch, the skewbacks having recently been set. Leaving 15 Mile Creek, this level, generally tracing the foot of a side hill, extends to the head of the pool of dam No. 6. There are a number of hill side earth works upon it, all of which are finished, or nearly so, bringing this part of the line almost to completion. Trifling depths of water have produced leaks upon this level, which indicate serious weakness; it should therefore be narrowly watched, whenever the navigation is opened upon it.

By lock No. 57, of 8 feet lift, which is now finished. we descend to the 56th level, at the head of the pool of dam No. 6. This level is 2 miles and 5,264 feet in length, and extending first through a favorable bottom, (where the tow path being within the reach of high water, it is contemplated to elevate it;) it next stretches along the base of a formidable hill side, and reaching sideling Hill creek, crosses over it by the finished aqueduct No. 8, of 60 feet span and 12 feet rise, and ultimately terminates in a narrow flat, about ½ mile below the

Owing to the weakness of the plan of riprap, the height of the levels above the river, the depth of water at the foot of the external slope, and the augmented rise of the freshets, caused by the pool, there are two sidehill sections upon the 67th, and four upon the 56th level, which require additional security; this I would propose to give, by forming along the foot of the river slope a dike of rock, 15 feet wide, its top elevated about 6 feet above low water, and its external slope not steeper than 1.½ to 1, and composed of heavy and durable stone.

Upon the level, 56th for  $\frac{3}{4}$  of a mile below lock No. 57, the tow-path has been unnecessarily laid broad off from the hill,