

20,000,000 gallons per day to the McTavish reservoir and about 6,000,000 *more* to a further elevation of 100 feet.

5th. ECONOMY.—In making out our estimate for this work we have, of course, carefully noted the difficulties met with in excavating the present aqueduct, and have accordingly, been liberal in both our quantities and prices. So liberal that we are perfectly satisfied our estimate of cost is fully ample, and are quite prepared to undertake the work ourselves and give unobjectionable security that we will complete it properly for the sum mentioned, viz: \$900,000. We are not disposed to criticise the various other plans proposed, or the estimates given for them, but still we cannot avoid asking the committee to bear with us while we run through the following simple rule of proportion, whereby we believe we may arrive at a pretty correct idea of the cost of one of the proposed plans, and that far and away the most practicable and reliable in its effects, as well as the only one for which we have any reliable *data* as to cost. We allude to the large open channel, as proposed by Messrs. Shanly and Francis. The total quantity of excavation in this work would be (according to Mr. Lesage's measurement) about 1,900,000 cubic yards, while the total quantity in the present aqueduct was about 684,000 cubic yards. Now, with the exception of fencing, puddling banks, and stone lining of slopes, which would be about equal in either case, we may safely say that all the other works would be in about the same proportion as the excavation. Then, when we remember the increase in the value of land since the present aqueduct was built, and the greater depth to which it is proposed to sink Messrs. Shanly and Francis' channel, and consequently the chance, nay certainty of meeting a larger per centage of rock and "hard pan," we think we are not far out in stating that the cost of the new channel would bear about the same proportion to the cost of the present aqueduct, that the total amount of excavation in the one bears to that in the other. That is, as 684,000 is to 1,930,000, so will \$600,000 (the first cost of present aqueduct) be to \$1,693,000, the probable cost of the new one. This is, of course, a very rough mode of calculation, but still, we believe it is sufficiently correct and practicable to give all we require, viz, a general idea what the probable cost would be. Let us now enquire whence comes this great difference of at least \$700,000 in the