

City Water Works.

Some time ago, the City Council appropriated the sum of \$4,900 for the purpose of constructing works for the supply of the city with water. The project contemplated the building of an embankment, and a water wheel, with an aqueduct for distributing the water. It was a most necessary work, and the Council have certainly done essential service to the citizens in undertaking it.

The embankment is about 500 yards long, and about fourteen feet broad; for the greater part, it is faced with a substantial wall of stone. It extends from the point where the water was formerly taken from the river, upwards, and this secures a permanent supply of water independent of all the chances of floods or overflows, as the work cannot be washed away by the action of the river. The work has been well done, and very cheaply, too, under the charge of Mr. B. Eaton.

The water wheel has been put in its place this week. It is an immense concern, being forty feet across, capable of raising 15,000 gallons an hour. It has been made, under contract, by Messrs. Perry & Woodworth, and is a creditable work.

The appropriation, however, is insufficient for the completion of the work as intended, and the Council will be compelled to vote further supplies. The water will be raised by the wheel to an elevation sufficient to throw a stream on the top of the highest houses in town. The best means of conducting the water to the town should at once be adopted,—this is, by an aqueduct of brickwork, which would be permanent. A ditch or flume would do, but these would be frequently requiring repairs and in the end be as costly. However, if the former be deemed too expensive, either of the others can be adopted. The work however, must not be left in an unfinished state, entailing a loss of a great part of the present expenditure. It is intended to construct a reservoir capable of supplying the wants of the city, in some of the dips or depressions in the hills.

There are thirty-two buckets, each carrying 4½ gallons; the wheel will make two revolutions in a minute, thus lifting 256 gallons a minute, or over 15,000 gallons an hour. The bucket is the invention of the contractors, Messrs. Perry & Woodworth, and displays great ingenuity. It is fastened along the arms of the wheel, and the water is held in by a valve, which on coming to the top, a handle strikes against a "cam," and is thus opened and the water rushes out.