

The Rome Water Works.

The citizens of Rome, N. Y., are jubilant over an important event in the history of their city. On Monday and Tuesday of this week, a thorough trial was made of their water works which have just been completed. The Rome Sentinel gives the following account of the trial on Monday:

The board of water commissioners of this city, in company with the gentlemen who furnished the machinery for our new water works and those who laid the pipes, made a preliminary trial of the works yesterday afternoon. Let the proud fact be recorded that on the 2d day of December, 1872, Mayor George Merrill opened for the first time a hydrant of the new water works of the city of Rome, for the purpose of throwing a stream, and that the result at once demonstrated the efficiency of the works, and proved them what had been promised—a grand success.

Fifty feet of hose were attached to the hydrant at the American corner and a perpendicular stream through a $\frac{1}{8}$ inch nozzle, was thrown to a height above the cupola of the American—the highest structure in town, with the exception of the church spires. Another hydrant was at the same time opened on Dominick street, midway between James and Washington streets, with the same amount of hose attached, and two streams were thrown horizontally a distance of 130 feet each. This was done under a pressure of less than 40 pounds to the square inch, and by pumping directly into the mains. It may be said, in fact, that we have double water works, inasmuch as we can draw a supply from the reservoir, or pump directly into the Pipes at a moment's notice.

It was remarked by many who witnessed the display yesterday, that splendid solid streams of water were being sent up—steady, forcible streams, without a particle of crackling or air in the water. The stream on Dominick street was put clear above the Mansard roof of the Central National bank building, the loftiest structure in that locality. The throwing of water yesterday satisfied all who witnessed it that we are now in as good shape to fight the fire fiend as water can place us.

But the exhibition of yesterday has by no means shown the full capacity of the Rome water works. To-day we hope to witness even more than we have thus far seen. But one of the water wheels used to drive the machinery was employed yesterday. This afternoon it is to be run at a pressure up to 60 pounds to the square inch. Four to five streams will probably be thrown at the same time, sending forth a deluge of water that will be likely to convince the most skeptical of the fact that our water works are a great and indispensable institution after all, and when we come to realize their value the wonder will be how we came to be so long without them.

The trial on the following day, Tuesday, was still more complete and successful; the fire department aiding in the exhibition with the use of their steamers. Four streams were thrown direct from the hydrants, over the highest and most prominent buildings in the city. The novel experiment of attaching a steamer to a hydrant to ascertain the pressure upon the pipes, and of testing the capacity of the hydrants for furnishing water to the steamers, was gone through with. A single hydrant supplying water in the usual manner, which was passed through the steamer and thrown to quite an elevation in two separate streams, without the machinery of the steamer being brought into use.

As anything pertaining to the subject of water works is of interest to our readers at the present time, a further mention of the above works in detail may be useful.

The water for the supply of the city of Rome for fire purposes and domestic use is pumped from the Mohawk river, at a point about two miles above the city, at which place a mill privilege was purchased by the commissioners. Two improved turbine wheels of seventy-two inch diameter, under a seven foot head of water furnish the necessary power for pumping. The turbine wheels were furnished by Adams & Co., of Rome, and are admirably adapted to the purpose for which they are used.

The machinery for forcing the water, furnished by the Watertown Steam Engine company, consists of two double-acting horizontal piston pumps, with extra large air chamber and Cornish balance valves. The water is pumped into a reservoir 800 feet distant, from which point it descends by gravitation, to the city; or it can be forced through the mains direct, by which means, any required degree of pressure can be attained for fire purposes.

Ten miles of mains and service pipes were laid by the American Water and Gas Pipe company of Jersey city. These pipes are constructed of wrought iron, of sufficient tensile strength to sustain a pressure of 200 pounds to the square inch, and lined inside and outside with cement, averaging three-quarters of an inch in thickness.

The entire cost of the above works complete, embracing both the gravitation and pressure plans, is under one hundred and fifty thousand dollars—which is only \$15 for each inhabitant for a supply of 100 gallons of water per diem.

The plans for these water works were furnished and the work constructed under the immediate direction of Peter Hogan, Esq., of this city. Mr. Hogan is an engineer of twenty years experience, and the successful manner in which this important undertaking has been accomplished evidences his ability in such branches of his profession.