

**TRIAL OF THE
COLUMBIAN STEAM ENGINE,
At Fair Mount Water Works.**

SIR,

I have the pleasure to inform you, that in the trial of Mr. Oliver Evans's Engine at Fair Mount, on the 26th and 27th insts. that nothing occurred to prevent its full performance during the 20 hours it was in operation.

Annexed is the result of the trial.

The Reservoir* below the wall is 58 inches deep.

From which is deducted 9½ inches of water which was in the reservoir at the time pumping began,

9½

—
48½ inches

at 25919 gallons per inch is 1,257,071 gal.

The water above the wall pumped was 63 inches at 27,083 gallons per inch,

1,706,598 Do.

Gallons pumped in 20 hours 2,963,669

If the calculation at the same ratio of pumping extended to 24 hours, the quantity would be additional,

592,732

Together 3,556,401 gal.

10 cords of oak wood was consumed in the 20 hours pumping.

The pumping as above calculated, gives an excess of 56,401 gallons over the stipulated quantity as per contract, or between 22 and 25 minutes work.

The pumping below the wall averaged 5 inches 6 8 and 1 16 per hour.

20 hours do. 5 inches 4 8 and 1 16 nearly.

The engine raised per hour 148,183½ gallons nearly.

Do. per minute 2,469 2-3, do.

Allowing the Engine to lift 100 gallons each stroke, the average working was nearly 24½ strokes per minute.

With respect,

Your humble servant,

(Signed) FREDERICK GRAFF.

Superintendent of the water works.

JOSEPH S. LEWIS, Esq.

Chairman of the Watering Committee.

December 1, 1817.

* The height of the reservoir above the Schuylkill (from which the water was pumped) is ninety-eight feet.

December 4th, 1817.

In Watering Committee.

The Committee appointed to confer with Oliver Evans, respecting the steam engine at Fair Mount, report that at their request the Engine has been put in operation, and after a trial of twenty hours working without interruption, during which performance there was delivered into the reservoir 2,965,615 gallons, they are satisfied she is capable of delivering upwards of 5,000,000 gallons in 24 hours, and have no hesitation in recommending to the Watering Committee, to receive her on the terms specified in the contract.

(Signed) JOHN MOORE,

JN. M CAULEY,

JOS. PRESTON,

} Committee.

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Extracts from the minutes of the watering committee.

JOSHUA ALLEN, City Clerk.

∫ Editors throughout the U. States, are requested to insert the above.

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