J. H. ALEXANDER, Decd.

J. I. ALEXANDER, Administrator.

GAS METER.

No. 184,056. Patented Nov. 7, 1876.

Fig. 1.

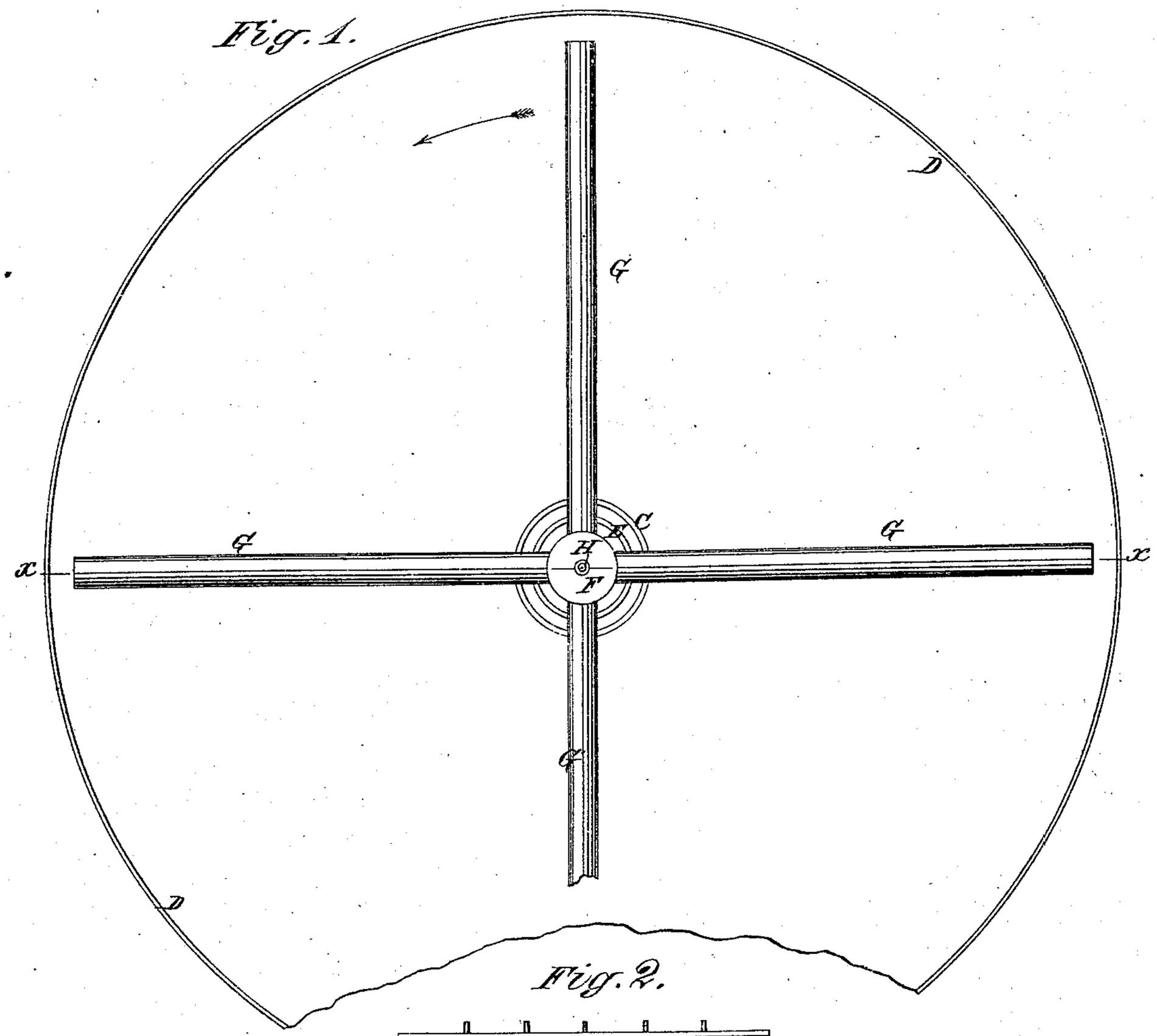
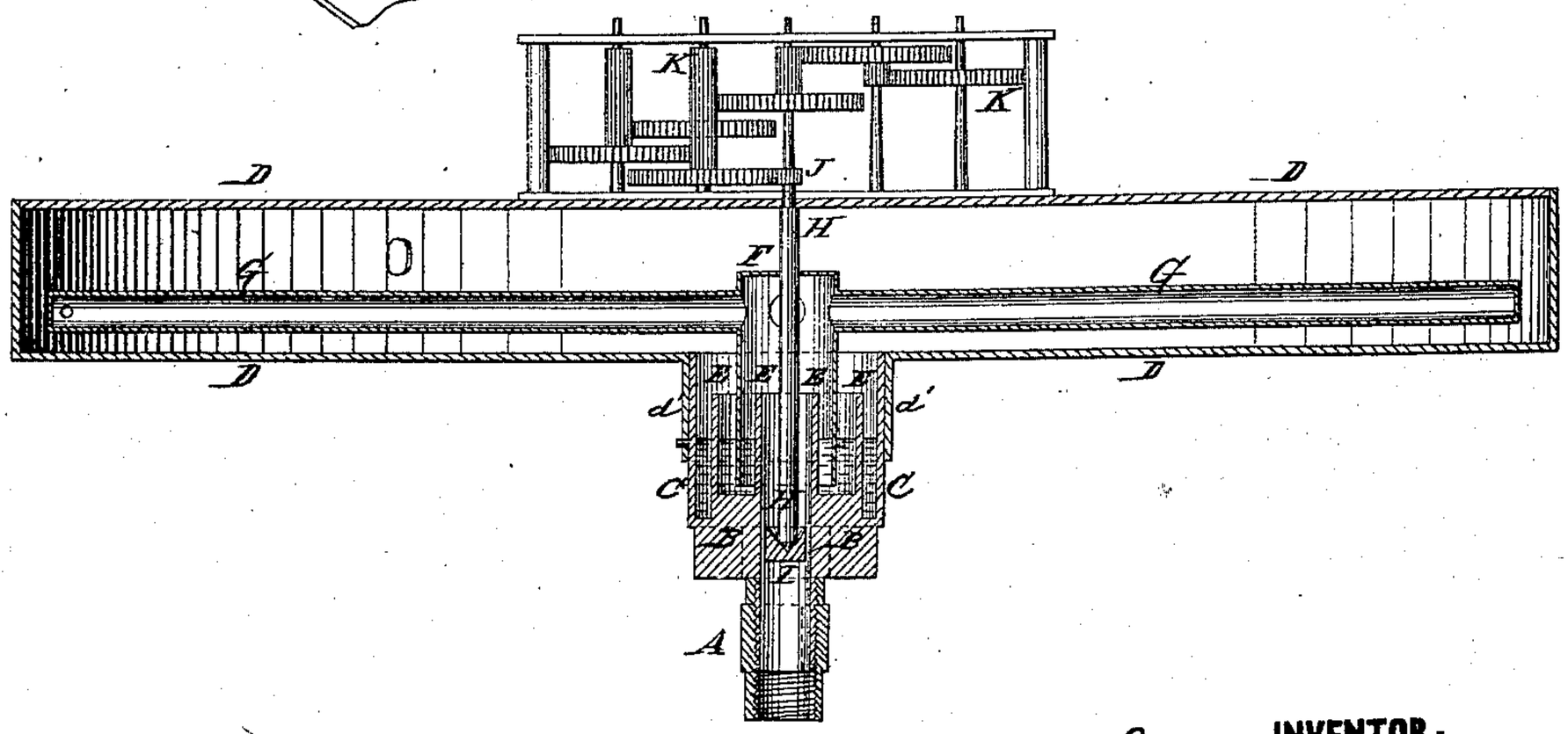


Fig. 2.



WITNESSES:

H. Rydquist

John Goethals

INVENTOR:

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BY J. I. Alexander administrator of J. H. Alexander deceased

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UNITED STATES PATENT OFFICE.

JULIAN I. ALEXANDER, OF BALTIMORE, MARYLAND, ADMINISTRATOR D. B. N. C. T. A. OF JOHN H. ALEXANDER, DECEASED.

IMPROVEMENT IN GAS-METERS.

Specification forming part of Letters Patent No. **184,056**, dated November 7, 1876; application filed September 30, 1876.

To all whom it may concern:

Be it known that JOHN H. ALEXANDER, of Baltimore, in the county of Baltimore and State of Maryland, did invent a new and useful Improvement in Gas-Meter, of which the following is a specification:

Figure 1 is a top view of the improved gas-meter, the top plate being removed. Fig. 2 is a cross-section of the same, taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved device that will measure the gas accurately as it passes from the service-pipe to the pipe leading to the burners, and which shall be simple in construction, and will occupy but little space.

The invention consists in an improved gas-meter formed by the combination of the box, the tubular armed wheel, the spindle, and the register with each other, as hereinafter fully described.

A represents a short pipe, which is to be connected with the gas-pipe, and to the upper end of which is attached a block, B. To the block B is attached a tubular flange, C, which interlocks with and is secured to a tubular flange, *d'*, formed around an opening in the bottom of the circular box D. To the upper side of the block B is attached a ring-cup, E, to receive the lower edge of the tubular hub F of the four-armed wheel G. The tubular hub F is closed at the top, and to said top is attached a spindle, H, the lower end of which revolves in a step, I, placed in the cavity of the block B, and made smaller than said cavity, so that it may not impede the passage of the gas. The upper end of the spindle H passes up through the top of the box D, and has a small pinion, J, attached to its upper end, the teeth of which mesh into the teeth of the first wheel of the train that forms the register K. In the rear side of the outer end of each of the arms of the wheel G is formed a small hole, through which the gas escapes, and by its reaction against the gas in the box D revolves the wheel D, the number of revolutions of said wheel being recorded by the register K, so that by calculating the quantity of gas that escapes at each revolution, and recording the number of revolutions of said wheel, the quantity of gas that passes through the machine can be accurately known.

The size of the holes in the arms of the wheel G, and the teeth of the register-wheels, are so regulated that the said register may record cubic feet.

The gas passes from the box D to the pipe leading to the burners through a hole in the side, bottom, or top of the said box.

Water or other liquid should be kept in the ring-cup E, into which the open lower end of the tubular hub F dips, to prevent gas from escaping around the end of the said hub.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

An improved gas-meter formed by the combination of the box D, the tubular armed wheel F G, the spindle H, and the register K, with each other, substantially as herein shown and described.

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Witnesses:
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