

T. MORIARTY.
Water-Meter.

No. 222,299.

Patented Dec. 2, 1879.

Fig. 1.

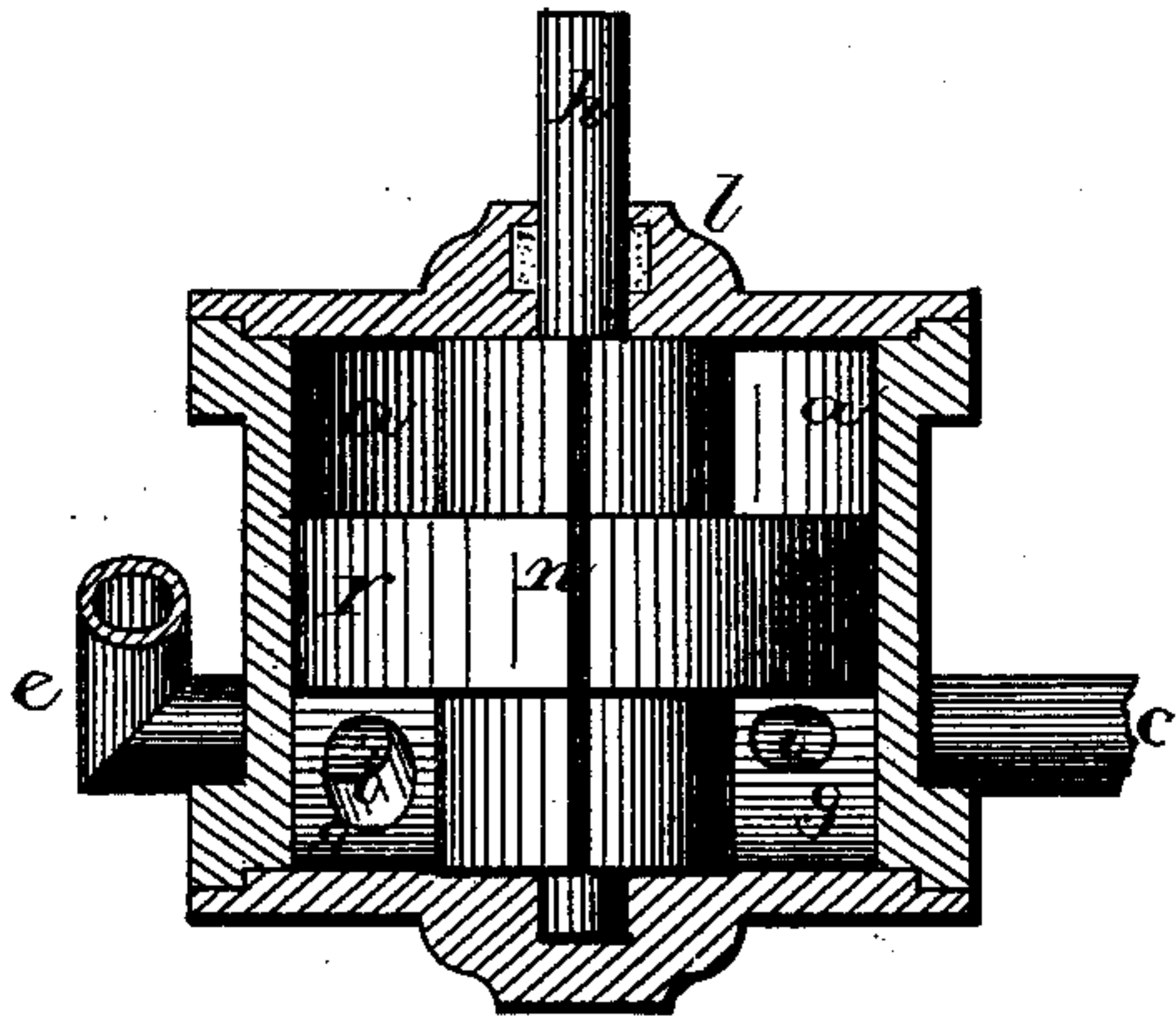


Fig. 2.

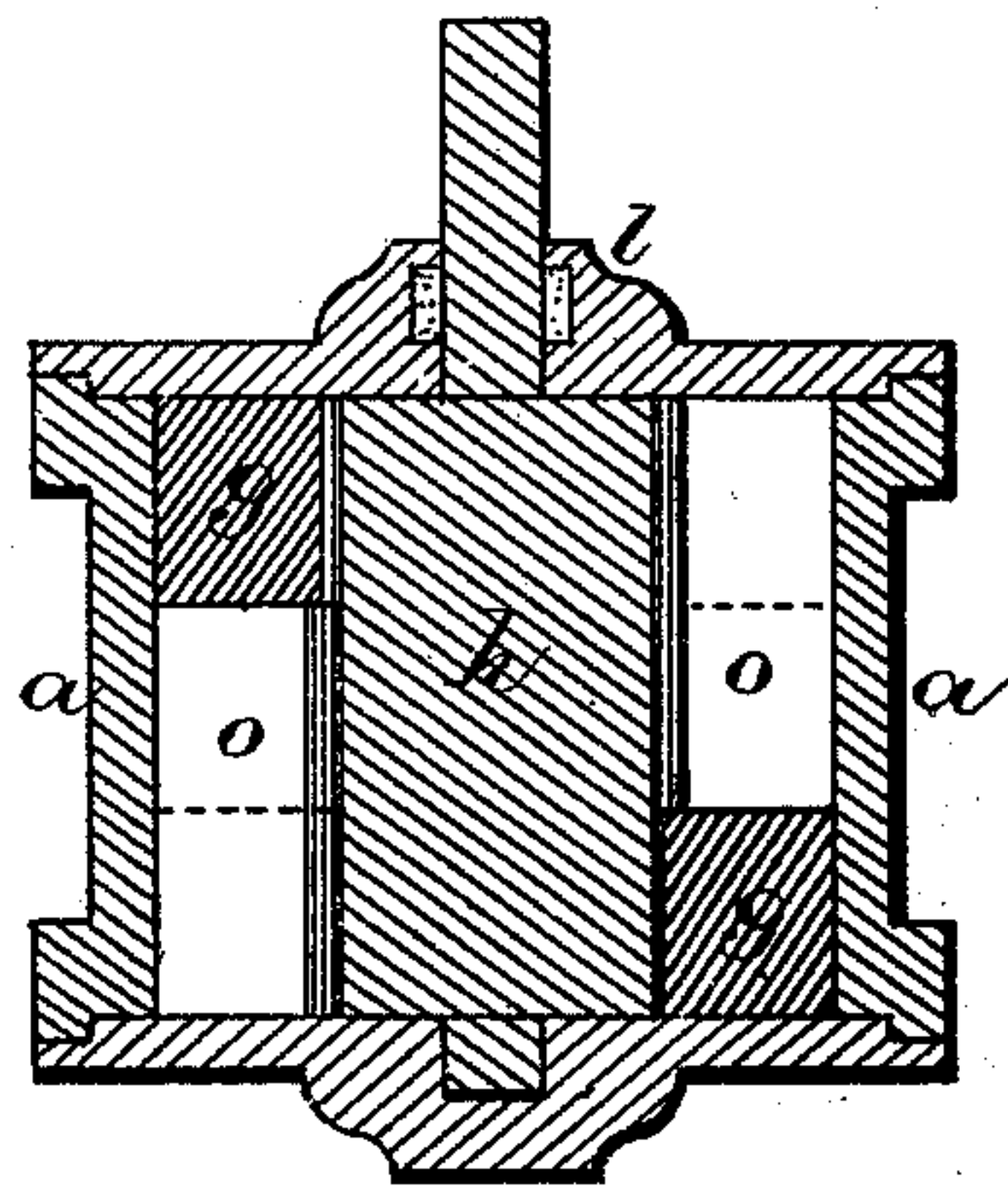


Fig. 3.

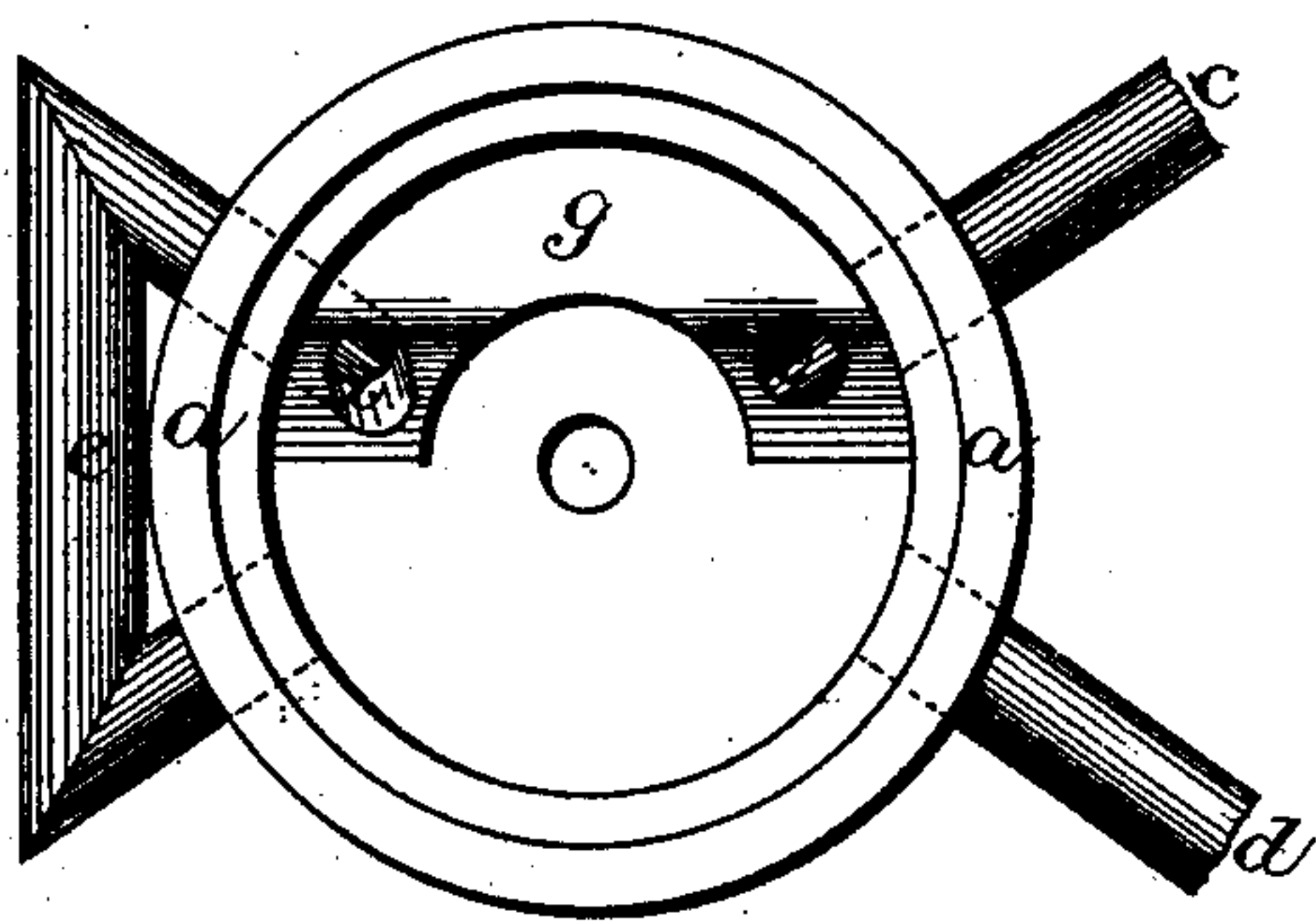
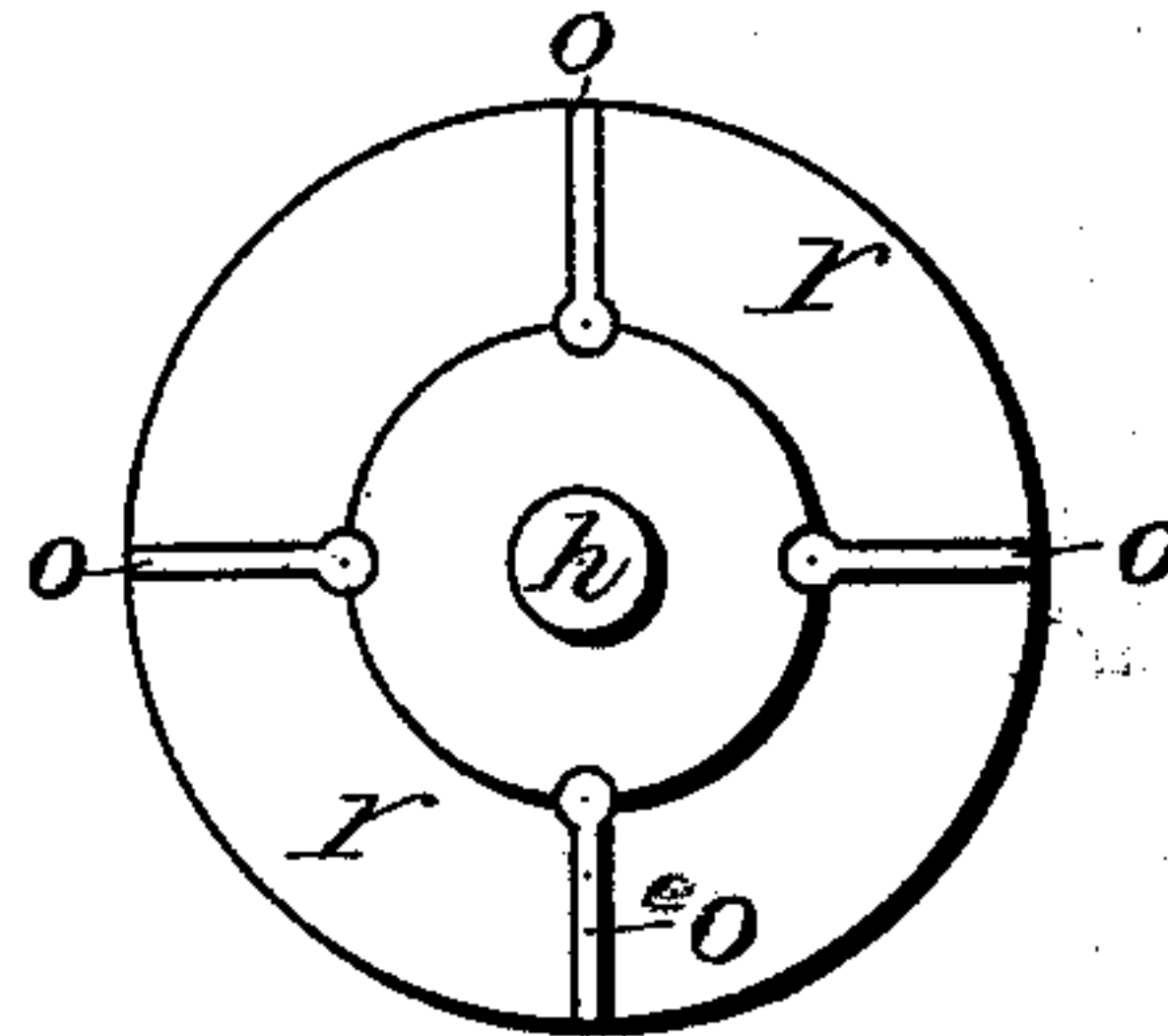


Fig. 4.



Witnesses:

J. W. Garner
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Inventor:
Thos. Moriarty
per
F. A. Lehmann
att'y.

UNITED STATES PATENT OFFICE.

THOMAS MORIARTY, OF LINCOLN, RHODE ISLAND.

IMPROVEMENT IN WATER-METERS.

Specification forming part of Letters Patent No. **222,299**, dated December 2, 1879; application filed October 2, 1879.

To all whom it may concern:

Be it known that I, THOMAS MORIARTY, of Lincoln, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Water-Meters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improvement in water-meters; and it consists in a circular case having an abutment on one side at the bottom and a similar abutment on the opposite side at the top, in combination with a revolving shaft, which is enlarged at the center of the case, and provided with a number of movable buckets or floats, as will be more fully described hereinafter.

Figures 1 and 2 are vertical sections of my invention, taken at right angles to each other. Fig. 3 is a plan view of the casing with the top, the internal mechanism, and top abutment removed. Fig. 4 is a plan of the shaft and floats.

a represents a circular case, which is provided with an inlet-pipe, *c*, an outlet-pipe, *d*, and a pipe, *e*, which has its lower and upper ends connected to the two ends of the case in such a manner as to take the water from the bottom of the case into the upper part. Secured to diagonally-opposite sides of the interior of this case are the two abutments *g*, one being at the bottom and the other at the top, and both of them have their ends beveled away, so that the floats will readily pass by them as they are carried around by the force of the water.

Through each one of the beveled ends of both of the abutments there is made a hole, *i*, through which the water passes to or from one of the pipes *c d e*. These holes are so arranged that the water is made to press against the floats as it is urging them around, and then is discharged at the most advantageous points.

The shaft *h*, which is centered in the bottom of the case and passes up through a suitable tight stuffing-box in the top *l*, is enlarged, as shown, at the center of the case, and in each one of the grooves *n* is placed a longitudinally-sliding float, *o*. These floats, as they are driven around by the water, are alternately raised up over one abutment, and then forced down under the other.

As the enlargement *r* on the shaft snugly fits the interior of the casing, and is just thick enough to reach from one abutment to the other, the water that is admitted through the inlet-pipe can only get into the top of the case through the inclined pipe *e*. The incoming water strikes against the lower-end of one of the floats and forces the float from one end of the abutment to the other, and as each float reaches the other end of the abutment it has forced all the water that was in front of it into the top of the case through the pipe *e*, where the water strikes against the rear side of the float that has just forced it up as that float is rising on the end of the abutment below.

By this construction the floats are made to revolve with less friction and wear than in the usual way.

Any suitable recording mechanism may be used.

Having thus described my invention, I claim—

In a water-meter, the combination of the case *a*, shaft *h*, provided with the enlargement *r*, floats *o*, abutments *g*, and pipe *e*, the abutments having the openings *i* in their ends, and the pipe being made to carry the water from the lower into the upper part of the case, substantially as shown.

In testimony that I claim the foregoing I have hereunto set my hand this 27th day of September, 1879.

THOMAS MORIARTY.

Witnesses:

GEO. D. BARKER,
ALDEN W. SIBLEY.