

*G. L. Jaeger,
Rotary Meter,*

No. 80,488,

Patented July 28, 1868.

Fig: 1.

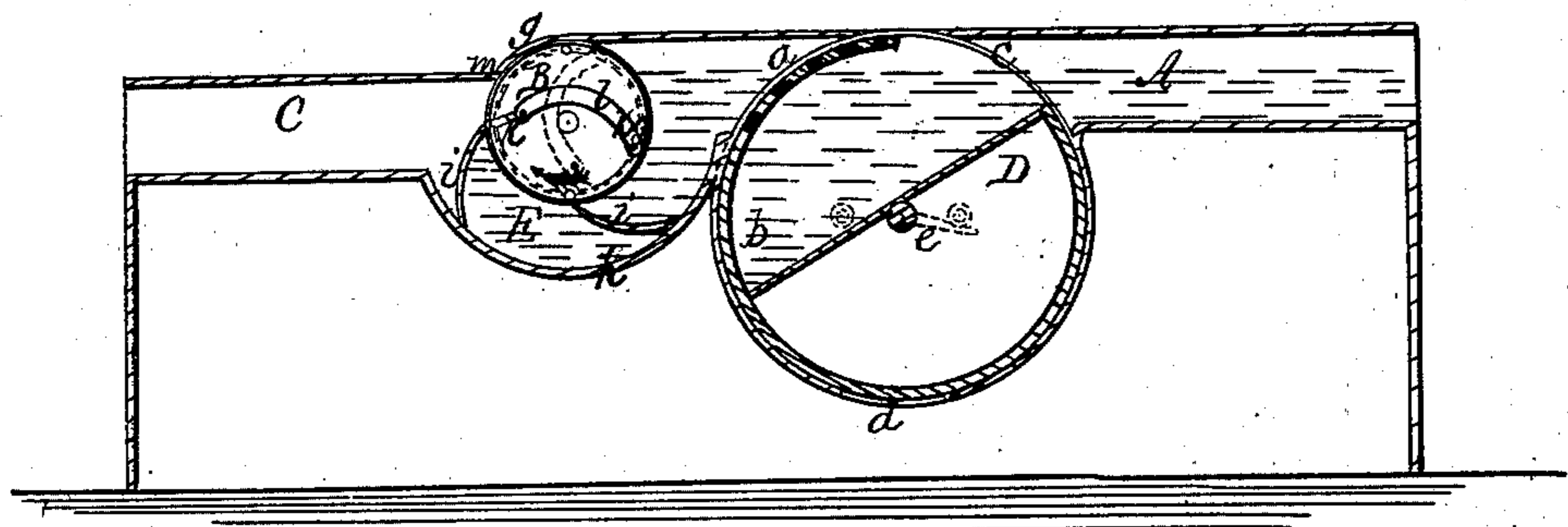
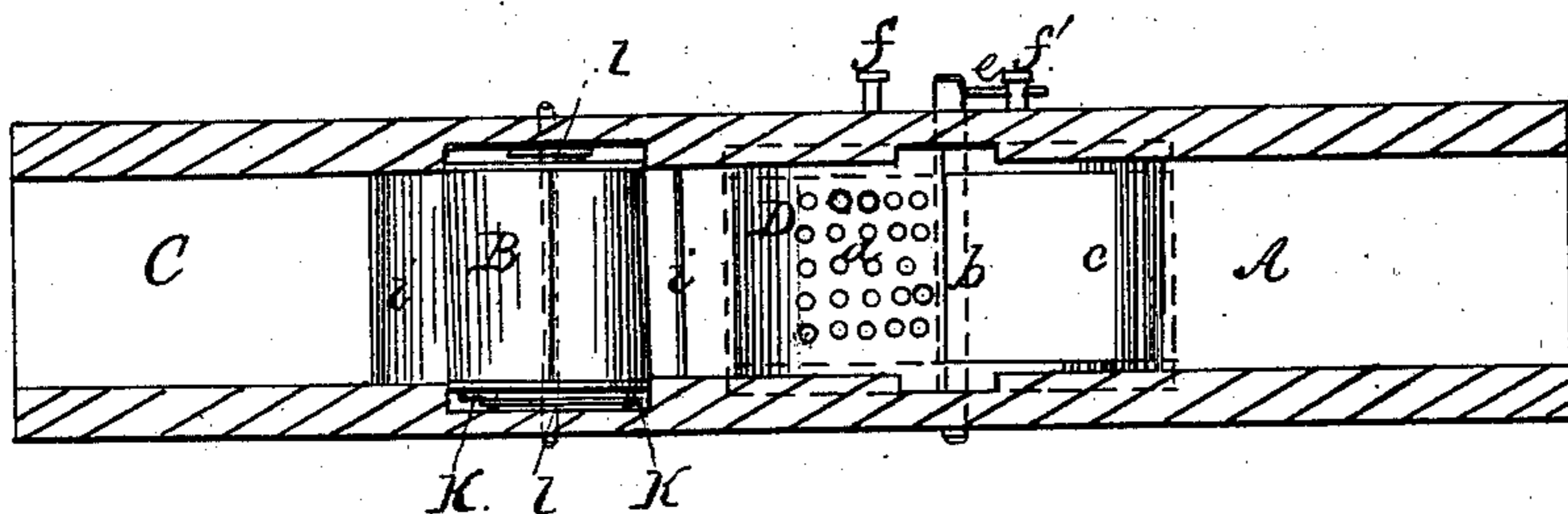


Fig: 2.



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GUSTAV L. JAEGER, OF NEW YORK, N. Y.

Letters Patent No. 80,488, dated July 28, 1868.

IMPROVEMENT IN WATER-METERS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, GUSTAV L. JAEGER, of the city, county, and State of New York, have invented a new and improved Fluid-Meter; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which drawing—

Figure 1 represents a longitudinal vertical section of this invention

Figure 2 is a horizontal section thereof.

Similar letters indicate corresponding parts.

This invention relates to a fluid-meter, the action of which is based on a wheel which revolves in a scroll or case, and carries an even number of hinged buckets, which are connected in pairs by cranks and rods, in such a manner, that, whenever one of the buckets strikes the closing edge of the scroll, said bucket is closed, and the bucket situated diametrically opposite thereto, and connected to it as above stated, is thrown open by a positive force, and that the fluid passing through the scroll acts on the wheel with the least possible waste.

The impurities which may be contained in the fluid are prevented from passing into the bucket-wheel by a straining-faucet, provided with a mud-cistern, and so arranged in the supply-channel that the fluid in its passage to the measuring-wheel is compelled to pass through the mud-cistern and strainer of the faucet.

A represents the supply-channel, which leads to the measuring-wheel B, and thence to the discharge-channel C. Between the supply-channel and the measuring-wheel is the stop-cock D, which is provided with a strainer, *a*, and with a mud-cistern, *b*. When the stop-cock is turned to the position shown in fig. 1 of the drawing, the fluid running in through the supply-channel is compelled to pass through the mud-cistern and through the strainer, before it is allowed to come in contact with the measuring-wheel. By the action of the mud-cistern and strainer, all impurities which may be contained in the fluid are retained, and a correct operation of the measuring-wheel is insured. By turning the stop-cock to such a position that the opening *c* coincides with an aperture, *d*, in the bottom of the shell, the impurities contained in the mud-cistern can be removed without permitting any waste of fluid, the supply-channel being closed when the stop-cock is turned in the last-named position.

A handle, *e*, working between the two stops, *f f'*, determines the position of the stop-cock.

The measuring-wheel, B, is fitted into a scroll, E, which is composed of a small segment, *g*, fitting closely to the circumference of the wheel, and of a large segment, *h*, which allows the buckets *i* to swing open, as shown in fig. 1. These buckets are mounted on axles which have their bearings in the rims of the wheel, and revolve freely therein, and on the ends of these axles are secured cranks *k*. The cranks of these buckets, which are situated diametrically opposite to each other, are connected by rods, *l*, which are curved or slotted, so that they clear the shaft of the wheel.

Whenever one of the buckets strikes the closing edge *m* of the scroll, said bucket is turned in, and at the same time the bucket connected to it by the rod *l* and cranks *k* is thrown open by a direct force, so that the fluid passing in through the supply-channel will act on said bucket, and cause the wheel to revolve in the direction of the arrow marked thereon in fig. 1. By this arrangement, the buckets are compelled to sweep in this position through the large segment *h* of the scroll, and very little, if any, fluid is permitted to pass the wheel without acting on the buckets, and causing said wheel to revolve.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The arrangement of the mud-cistern *b* and strainer *a* in the plug of the stop-cock D, substantially as and for the purpose described.
2. The rods *l* and cranks *k*, connecting diametrically-opposite buckets of the wheel B, which runs in the scroll E, substantially as and for the purpose set forth.

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Witnesses:

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