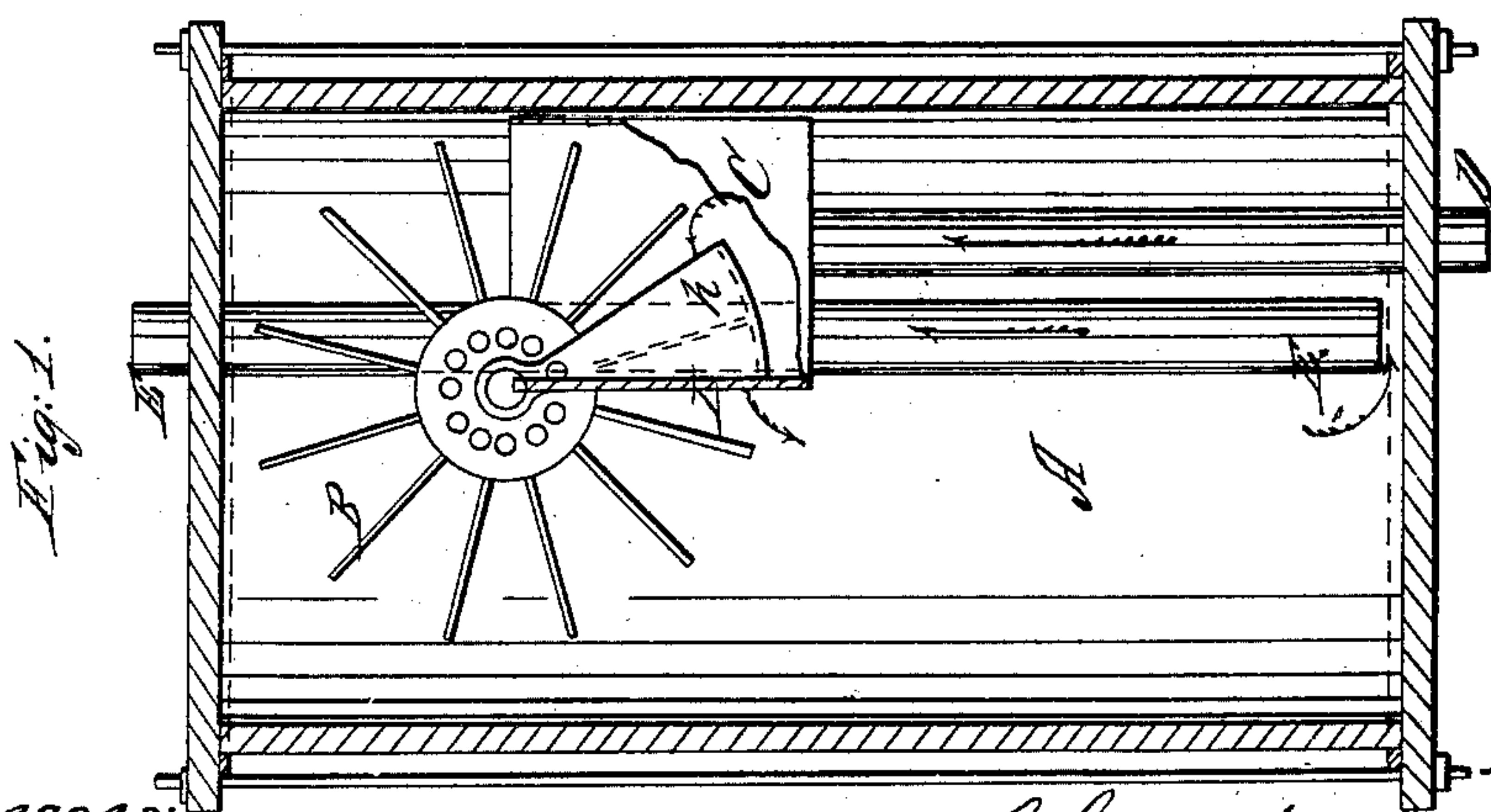
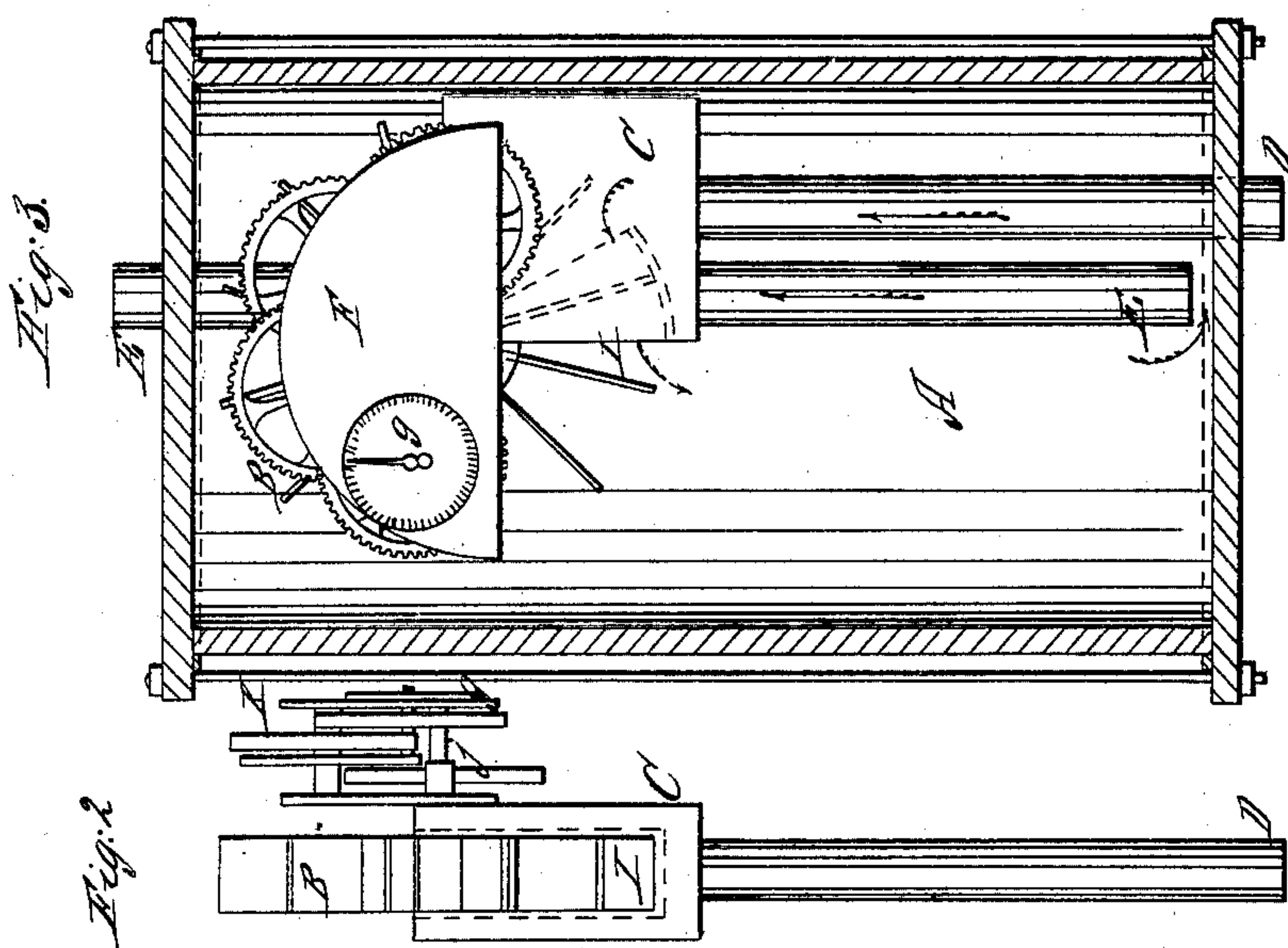


C. A. & G. W. Geissenhainer,

Rotary Meter,

N^o 82,105.

Patented Sep. 15, 1868.



Witnesses:

*Jonathan P. Smith
Walter Rexton*

Inventors:

*Chas. A. Geissenhainer
Geo. W. Geissenhainer*

United States Patent Office.

CHARLES A. GEISSENHAINER AND GEORGE W. GEISSENHAINER, OF PITTSBURG, PENNSYLVANIA.

Letters Patent No. 82,105, dated September 15, 1868.

IMPROVEMENT IN LIQUID-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 we, CHARLES A. GEISSENHAINER and GEORGE W. GEISSENHAINER, of Pittsburg, in the county of Allegheny, and in the State of Pennsylvania, have invented certain new and useful Improvements in Water-Meters; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

In the annexed drawings, forming part of this specification—

Figure 1 is a rear view,

Figure 2 a side view, and

Figure 3 a front view.

The nature of our invention consists in the adjustment of a water-wheel, with its indicating-apparatus, in an air-tight chamber, in such a manner that the water entering the chamber through a pipe will revolve the wheel, and pass out, by the pressure of the air, through another pipe, the indicator showing the number of revolutions the wheel has made.

To enable others skilled in the art to make and use our invention, we will proceed to describe its construction and operation.

A represents an air-tight glass chamber, with metal top and bottom, which are held together by rods passing through them, and tightened by screws, the joints between the glass chamber and the metal top and bottom being made air-tight by means of India-rubber packing.

In the bottom of the chamber A, a pipe, D, is inserted, through which the water passes from the water-main into a box, C, fastened on top of the pipe.

In this box C, a water-wheel, B, is adjusted, in such a manner that the water rising in the box will press against the buckets of the wheel, causing it to revolve, and permitting the water to pass out at the opening, I, in the box.

In the top of the chamber A, another pipe, E, is inserted, the lower end of which extends to within a short distance of the bottom of the chamber.

The water rising in the chamber A, and above the lower end of the pipe E, compresses the air in the chamber, and forces the water out through the pipe E, in the top of the chamber.

On the side of the box C is placed the indicating-apparatus, F, the wheels of which are made to revolve by the pinion J, on the shaft of the wheel B, the indicator, g, showing the number of revolutions made by the wheel B.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The arrangement, in the air-tight glass chamber A, constructed as herein described, of the straight bucket-wheel B, water-chamber C, pipes D E, cog-wheels B, and indicating-devices g, all constructed as and for the purposes set forth.

In testimony that we claim the foregoing, we have hereunto set our hands, this 1st day of May, 1868.

CHAS. A. GEISSENHAINER,
GEO. W. GEISSENHAINER.

Witnesses:

C. M. ALEXANDER,
J. M. MASON.