

(No Model.)

J. VLADYKA.
WATER CLOSET.

2 Sheets—Sheet 1.

No. 334,911.

Patented Jan. 26, 1886.

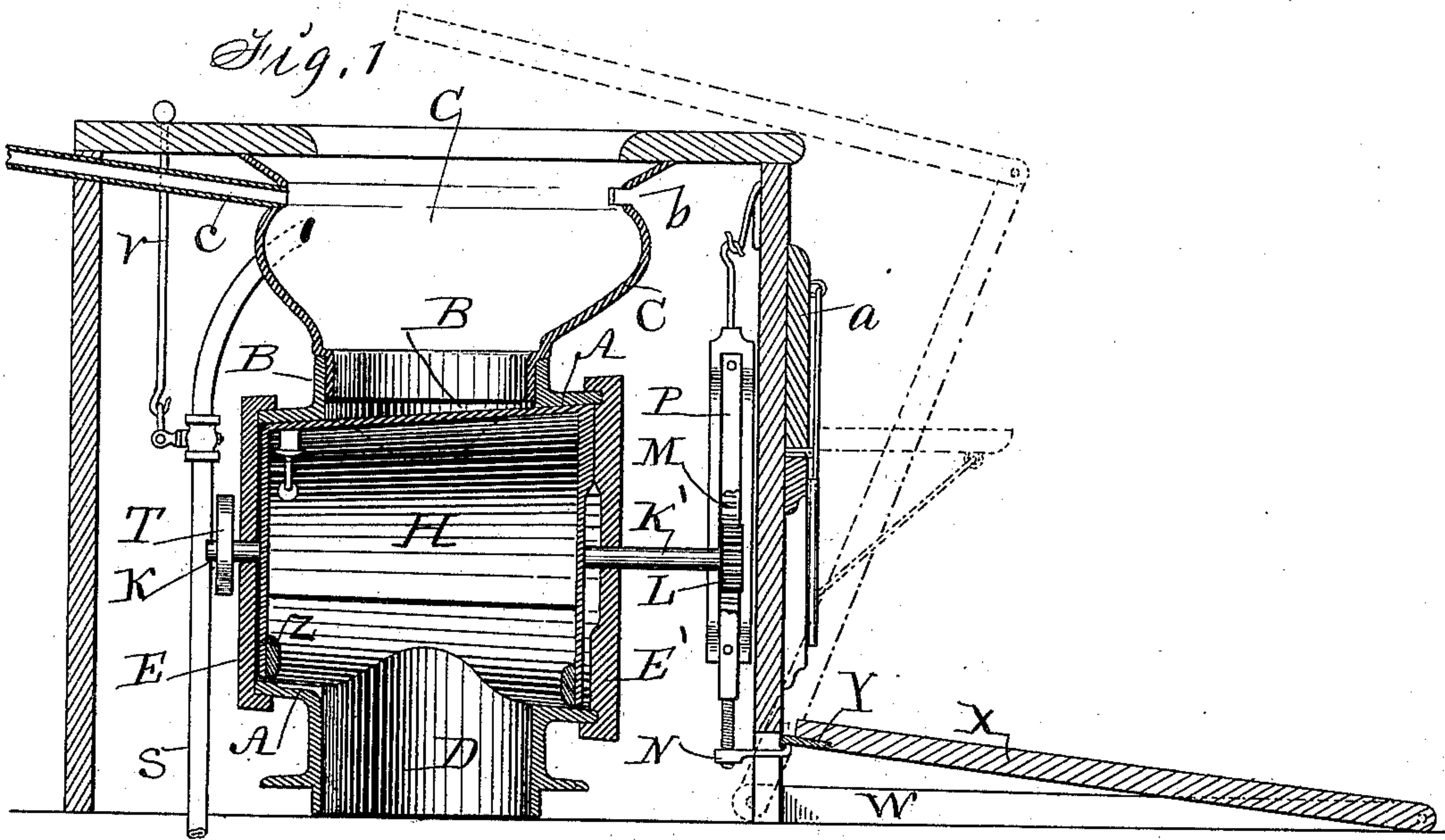


Fig. 2

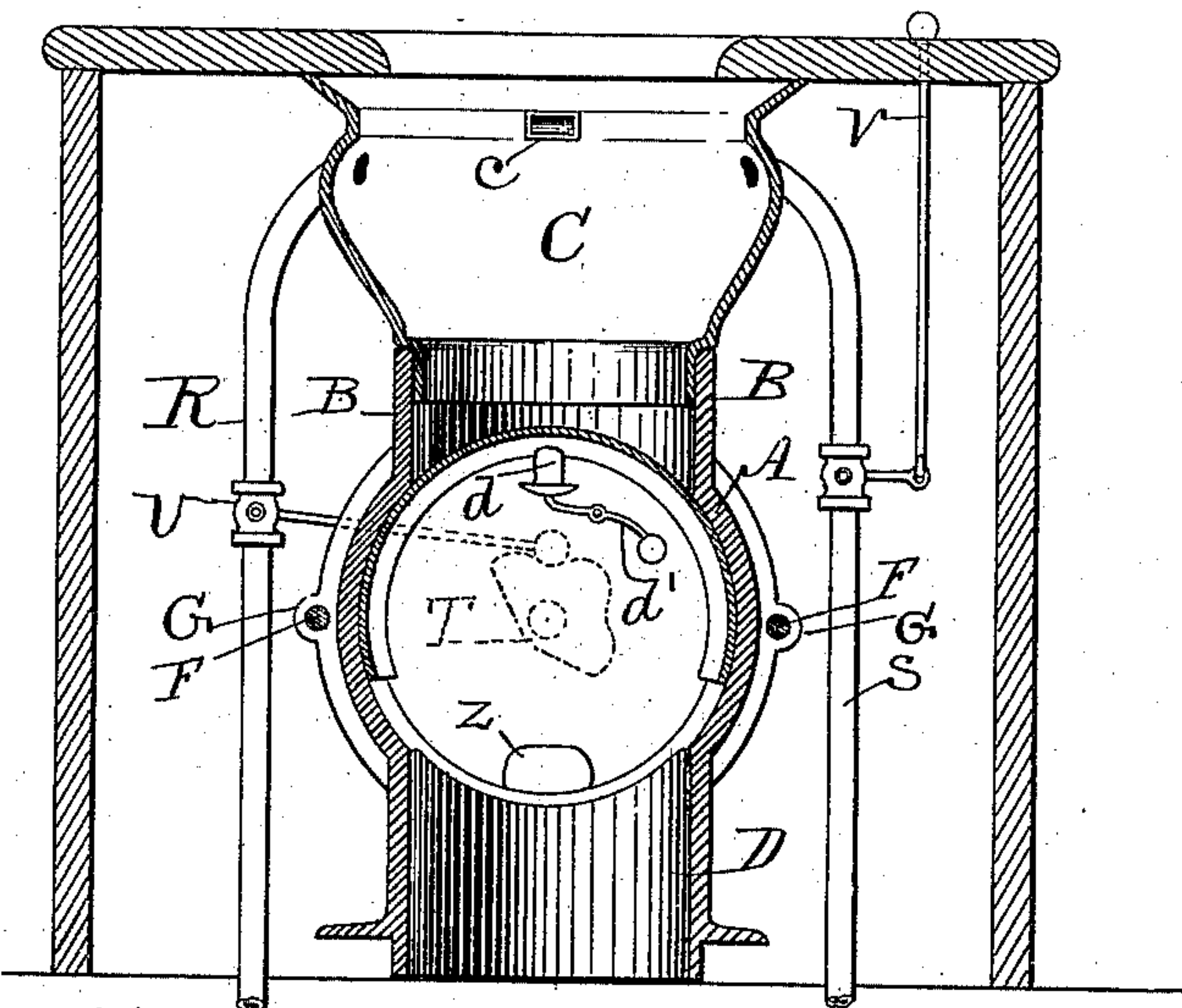
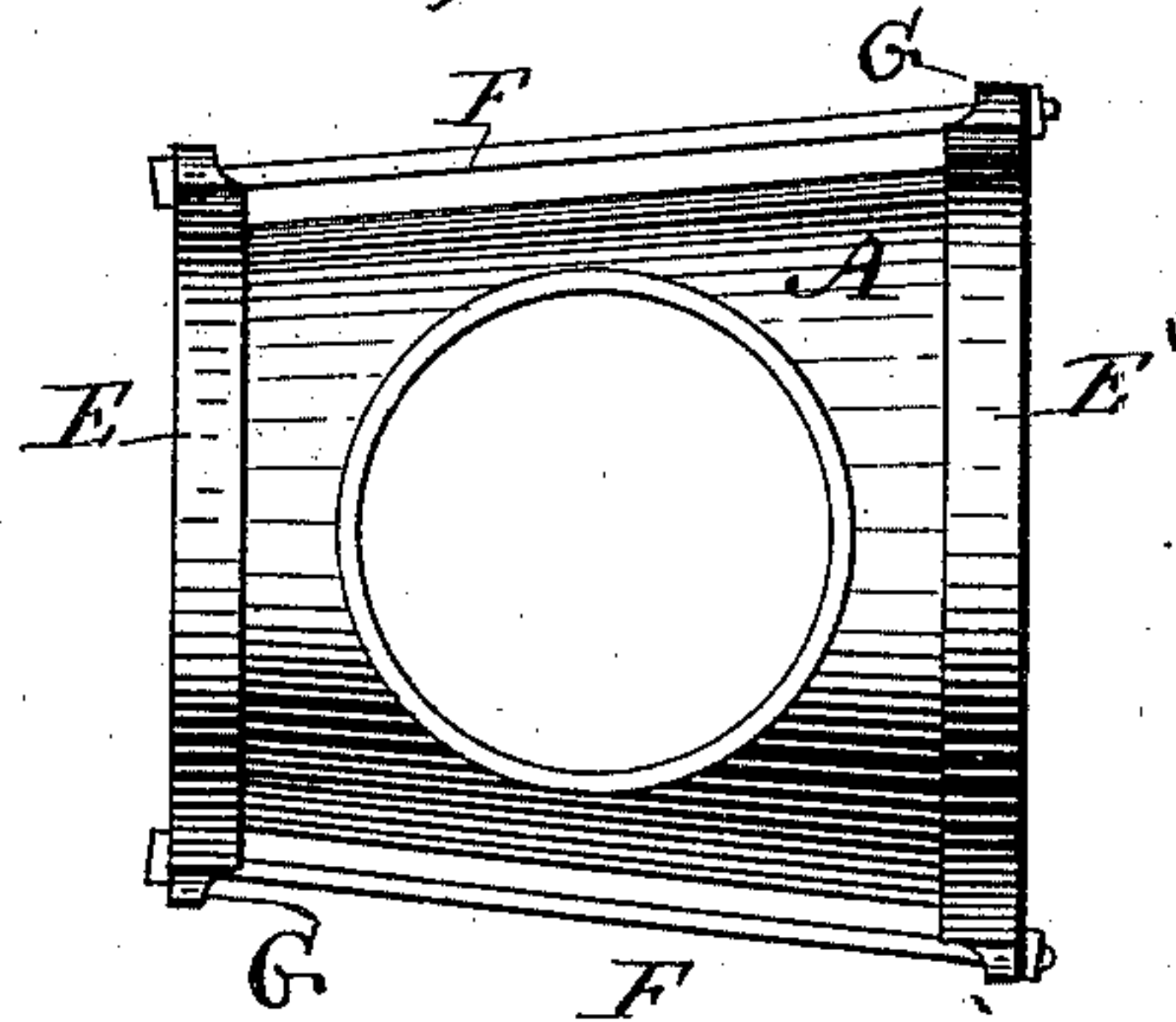


Fig. 3



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Inventor:
Joseph Vladyka,
By Thomas G. Orwig, Atty.

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Fig. 4

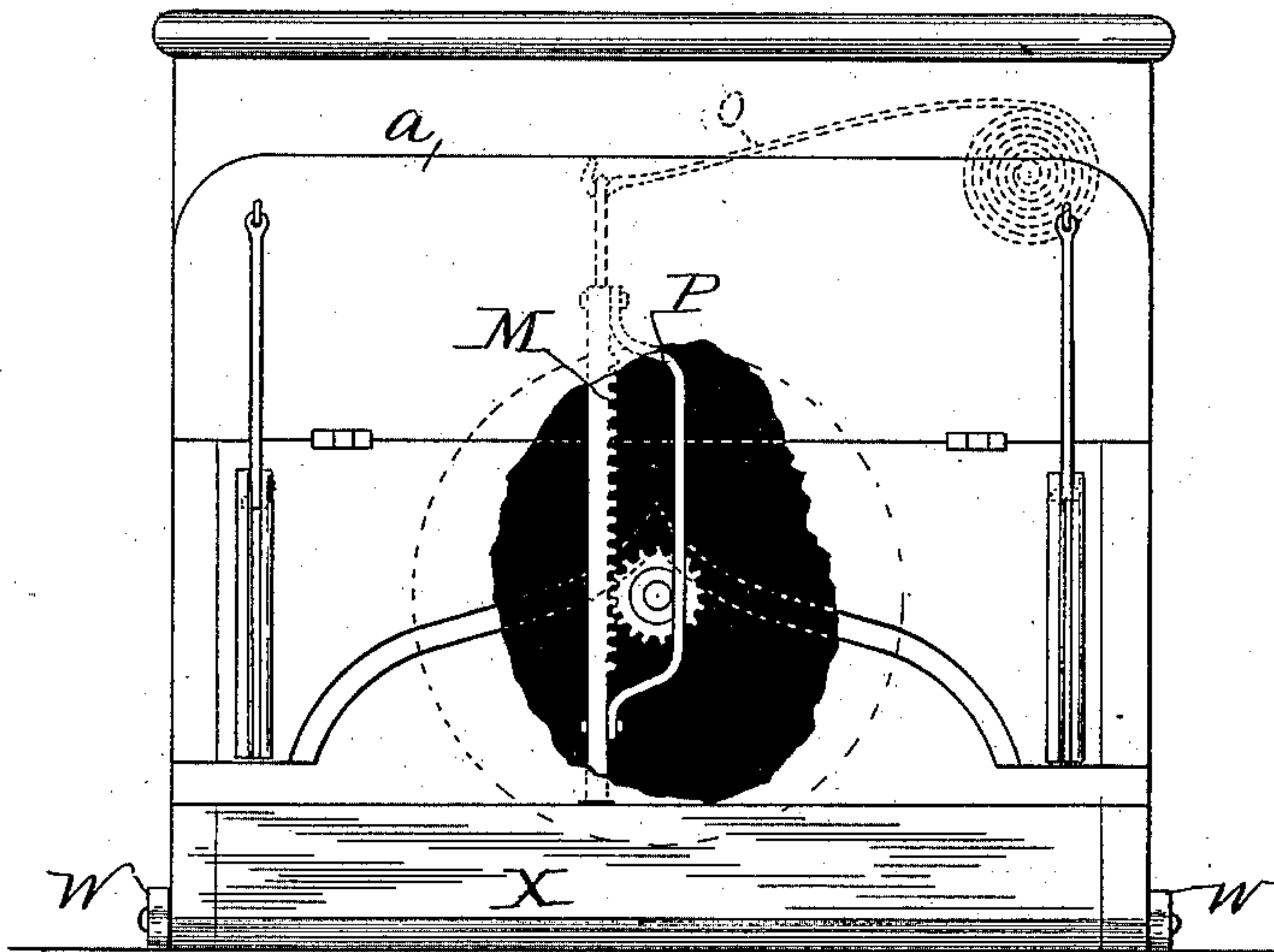


Fig. 5

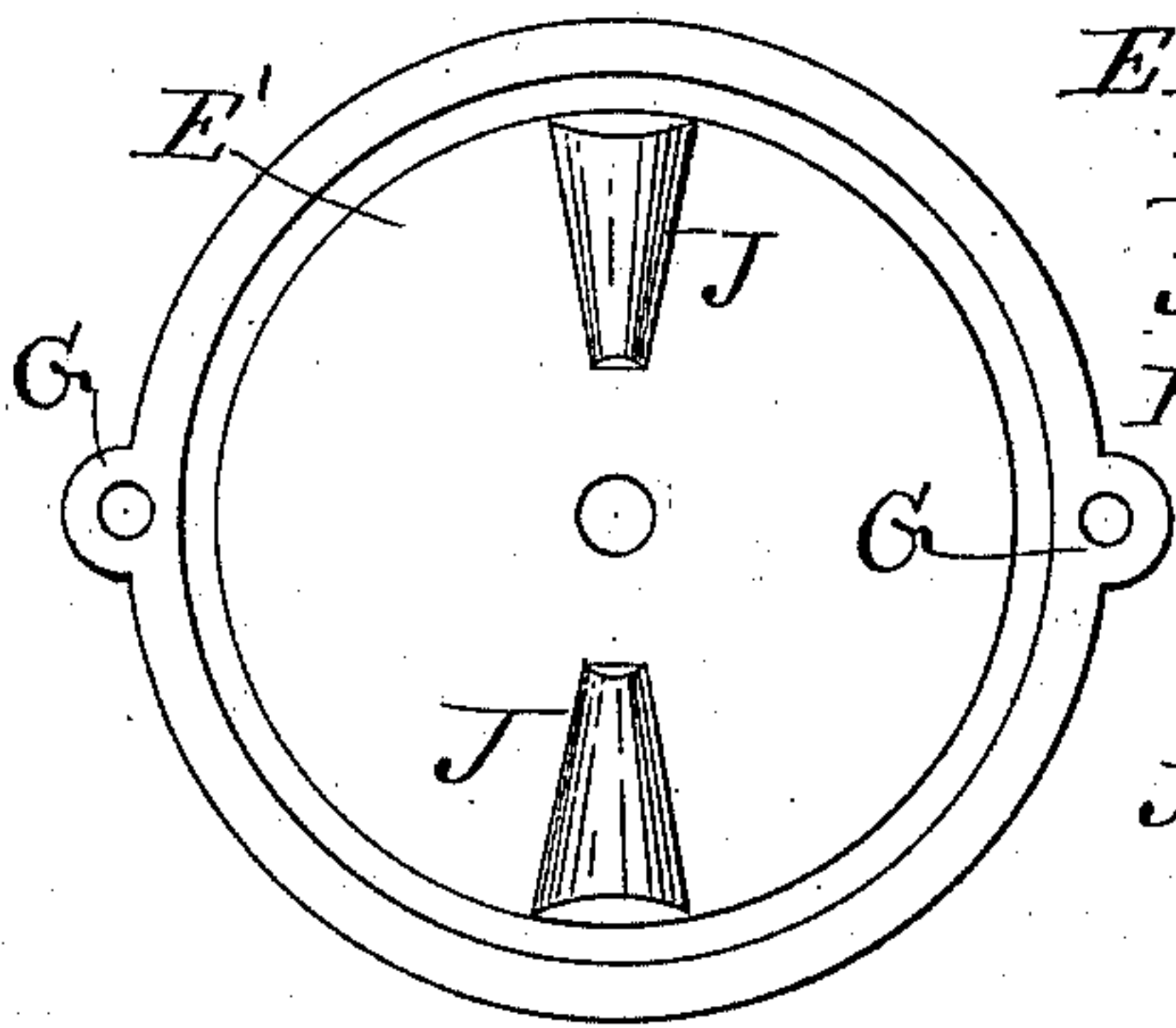


Fig. 6

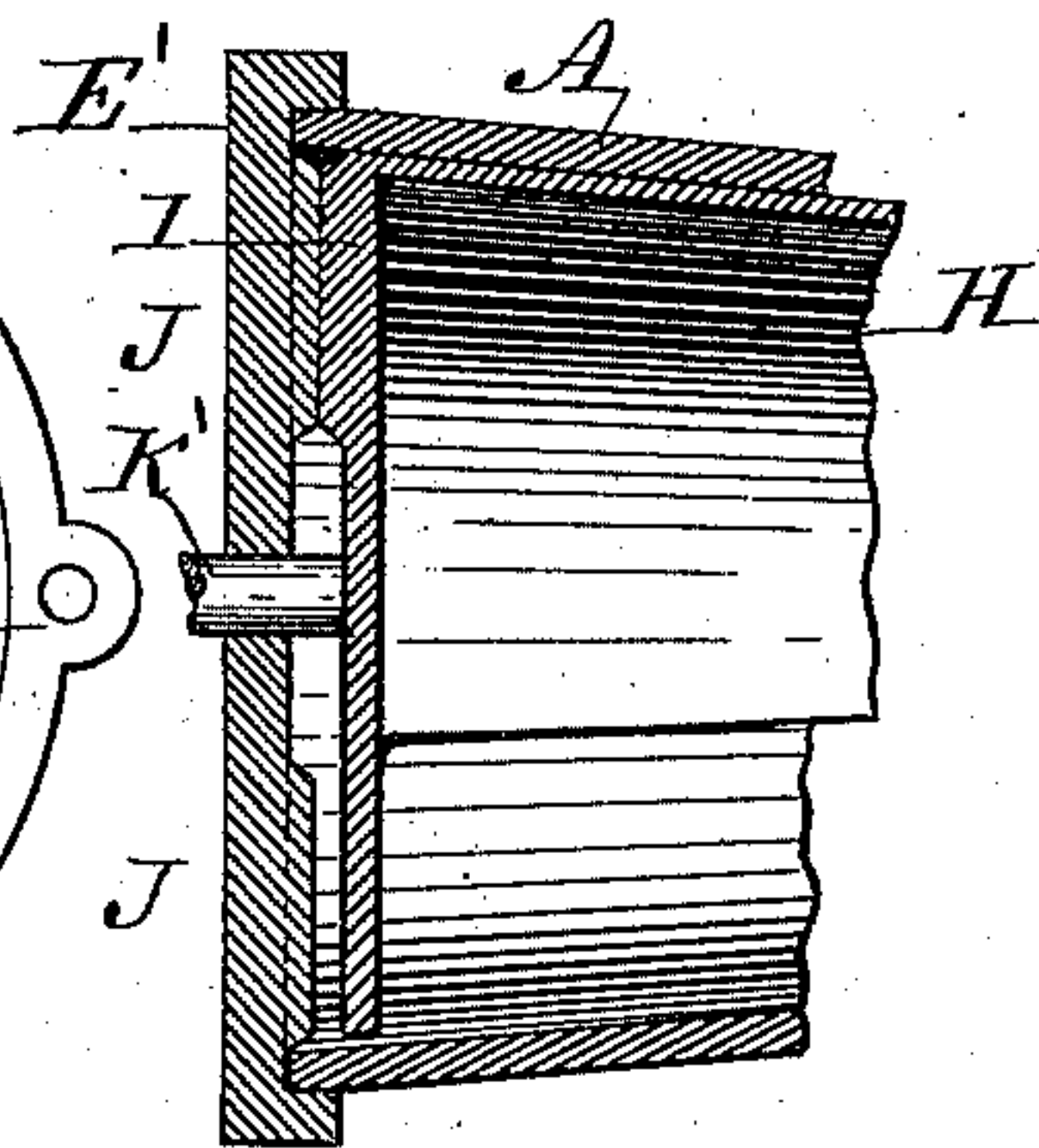


Fig. 7

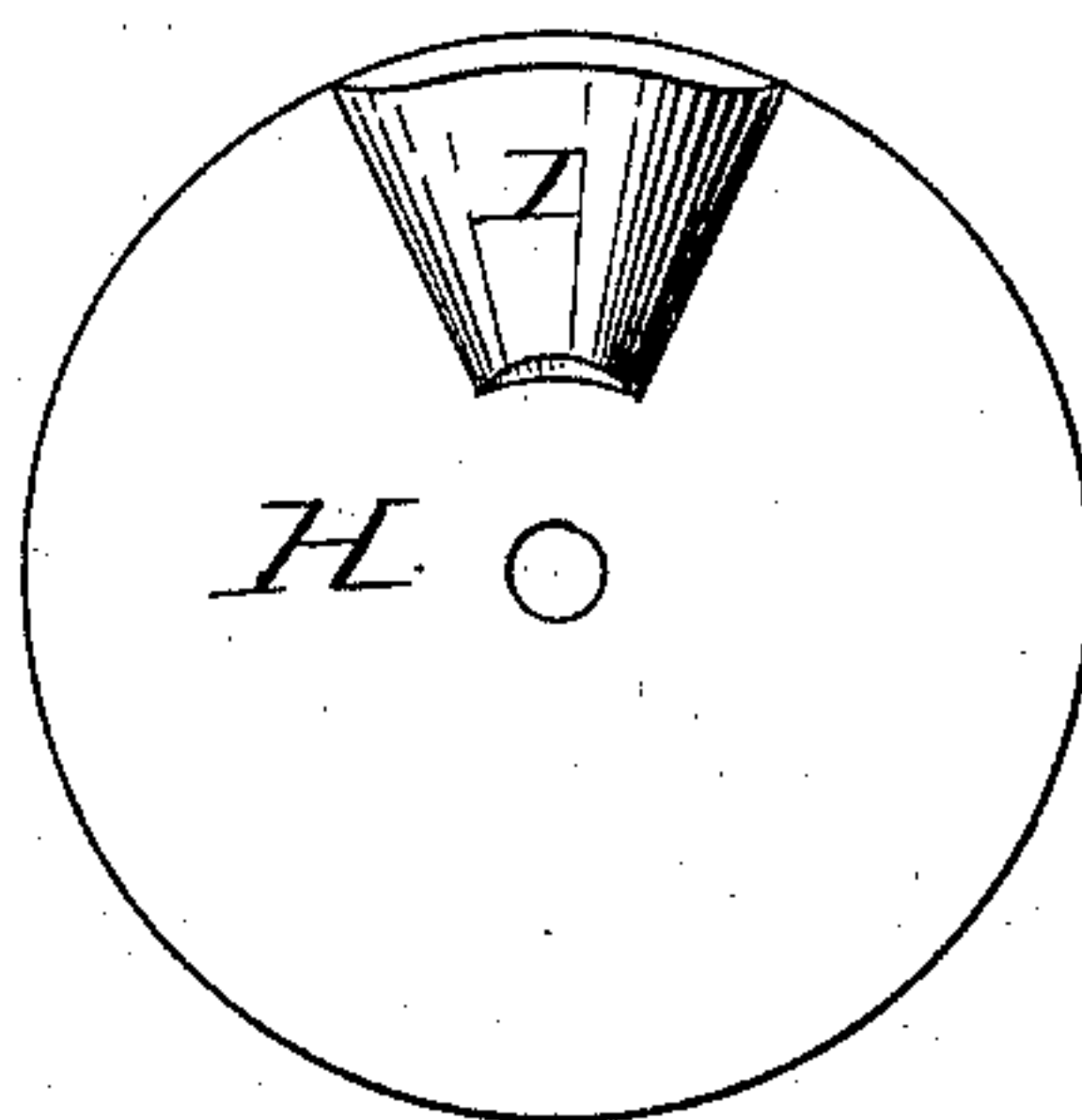
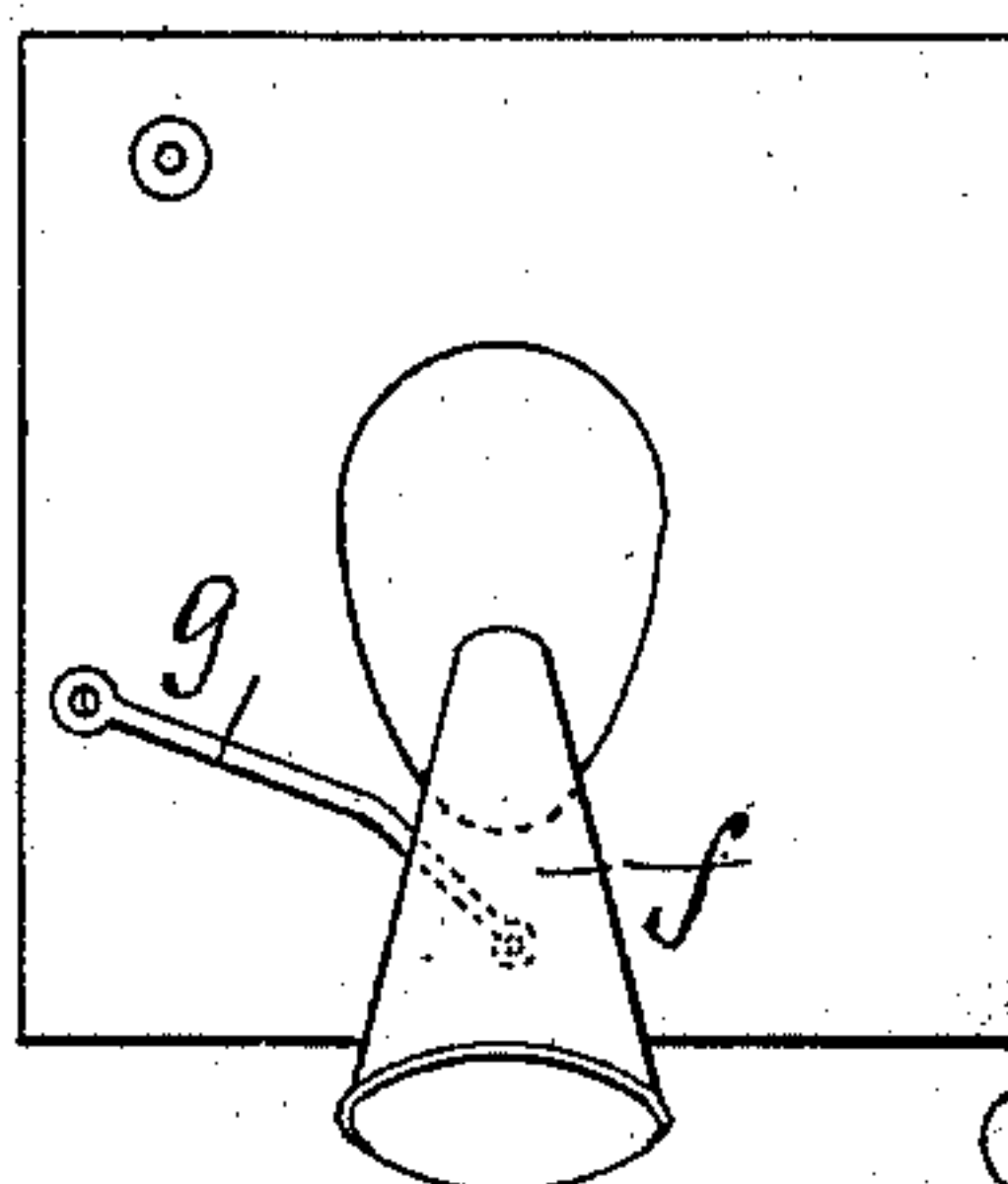


Fig. 8



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UNITED STATES PATENT OFFICE.

JOSEPH VLADYKA, OF NEWTON, IOWA, ASSIGNOR OF ONE-HALF TO J. M. GALUSHA AND WILLIS M. MITCHELL, BOTH OF SAME PLACE.

WATER-CLOSET.

SPECIFICATION forming part of Letters Patent No. 334,911, dated January 26, 1886.

Application filed June 15, 1885. Serial No. 163,694. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH VLADYKA, a citizen of the United States, residing at Newton, in the county of Jasper and State of Iowa, have invented new and useful Improvements in Water-Closets, of which the following is a specification.

My object is to promote cleanliness in water-closets, to prevent the escape of odors and sewer-gas, and to adapt the same seat to be used by children as well as by adults; and my invention consists in the construction and combination of a water sealing-valve, automatic valve-operating mechanism, an auxiliary step, and an adjustable urinal, with a bowl and seat, as hereinafter set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a longitudinal section of the valve in position; Fig. 2, a transverse section of the same; Fig. 3, a top view of the valve-chamber; Fig. 4, a front view of the seat; Fig. 5, an enlarged view of the inner side of the valve-chamber head. Fig. 6 is a section of the valve and chamber, and Fig. 7 is an end view of the valve. Fig. 8 shows a urinal pivoted to the top of a seat.

Similar letters refer to similar parts throughout the several views.

The valve-chamber A is a truncated cone, having its largest end at the front of the seat. This chamber is made of cast-iron, and has a collar, B, projecting from its upper side to receive the bowl C. A similar, but longer, projection, D, is designed to be connected with the top of a pipe that extends downward.

E and E' are the valve-chamber heads. They are flanged so as to fit over the ends of the valve-chamber, and are secured by rods F passing through lugs G, cast on the heads. These rods have heads at one end, and are threaded to receive nuts at the other.

H is a valve adapted in shape to fit into the valve-chamber. It is shorter than the chamber and has a projection, I, cast on the outer side of its larger end, as shown, to engage radial projections J on the inner side of the larger valve-chamber head, so that when the valve is either open or closed the contact of these pro-

jections cause the valve to be driven tightly against its seat.

The heads E and E' are perforated at their centers to receive the journals K and K', which are attached to the ends of the valve. The journal K has a pinion, L, on its free end, which pinion engages a rack, M. This rack has a rod extending down from its lower end, and the rod is screw-threaded to receive an adjustable toe, N. At the upper end of the rod is a hook, which hook is connected with the end of a spiral spring, O, that is attached to the seat. Upon the rack is fixed a guard, P, which embraces the pinion, as shown, and holds the rack engaged with the pinion.

R and S are supply-pipes for cold and hot water, respectively.

The journal K has a cam, T, shaped as shown, fixed to it, which cam engages the end of a lever attached to the cock V. This cam is so adjusted that when the valve is being opened water will be turned on; but when the valve is completely open the water is turned off, and in a reverse motion, when the valve is closing, enough water is admitted on top of the valve to water-seal it. On the hot-water pipe S the cock is worked in a common way by means of the handle V. On each side of the seat, just above the floor, is pivoted an arm, W. A foot-board, X, is pivoted to the outer ends of these arms, as shown. At the free end of this board is a hook, Y, which engages the toe N. This foot-board can be folded over the top of the seat to serve as a cover, as indicated by broken lines in Fig. 1. When a weight rests upon this board, the toe N and the rack M are jointly depressed, and the pinion L thereby revolved, as required, to rotate the valve H. A weight, Z, is attached on the inside of each end of the valve to co-operate with the spring O in closing the valve.

To adapt this closet for the use of children a hinged shelf, a, is provided, which operates as shown.

The apparatus is ventilated by means of an air-induction port, b, and eduction-pipe c, that is designed to be connected with a flue.

In order to prevent the valve from getting too full an automatic relief-vent is provided.

A short pipe, *d*, is fitted to the valve, as shown, and is kept closed by a weight on the end of a pivoted lever, *d'*, when the valve is closed. When the valve is opened, the weight
5 falls and the vent is opened.

This apparatus is operated as follows: When a person steps upon the board X, the rack M is depressed, causing the pinion L to revolve and rotate the valve H until its open side is
10 turned upward. At the same time the spring O is compressed. As the valve is turning, the cam T, acting on the lever, opens and closes the cock U to admit water to the valve H. Upon stepping off the board the spring O, acting in
15 concert with the weight Z, raises the rack M, rotates the pinion L in the opposite direction, and thereby closes the valve. By means of the cam T the cock U is opened and closed at the proper time to allow the flow of a sufficient
20 quantity of water to seal the valve. When it is desirable to use warm water, the warm-water cock is operated by hand by means of the rod V.

f (shown in Fig. 8) represents a funnel-shaped urinal pivoted to the seat by means of an arm, *g*, in such a manner that it can be
25 readily adjusted, as required, to direct urine into the bowl C.

I am aware that water closet valves have
30 been operated by means of racks and pinions and an adjustable foot-board; but my manner of constructing a cylindrical valve and rotating it in reverse ways, and my manner of pivoting a foot-board to arms pivoted to a seat to

adapt it to be used as a foot-board and valve- 35 operating device, and also as a cover for the seat and bowl, is novel and advantageous.

I claim as my invention—

1. The valve for water-closets consisting of the chamber A, having a flange or collar, B, 40 and projections on the inside of its largest end, and the rotating valve H, having journals on its ends, and a projection, I, on the outside of its largest end, in combination with a bowl or basin, as and for the purposes stated. 45

2. The valve H in the chamber A, the journals K and K', the fixed pinion L, the rack M, having a toe attached at its lower end, the guard P, the spring O, and the platform or foot-board X, having a hook or projection to 50 engage the toe N, arranged and combined to operate in the manner set forth, for the purposes stated.

3. The combination of the valve-chamber A, the valve H, having journals on its ends, 55 the cam T, fixed to one of the journals, a water-supply pipe R, having a cock, V, and a lever extending therefrom to the said cam, for the purposes set forth.

4. The pivoted arms W, and the platform 60 X, pivoted to the free ends of the said arms, in combination with a water-closet seat, for the purposes stated.

JOSEPH VLADYKA.

Witnesses:

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