

No. 638,888.

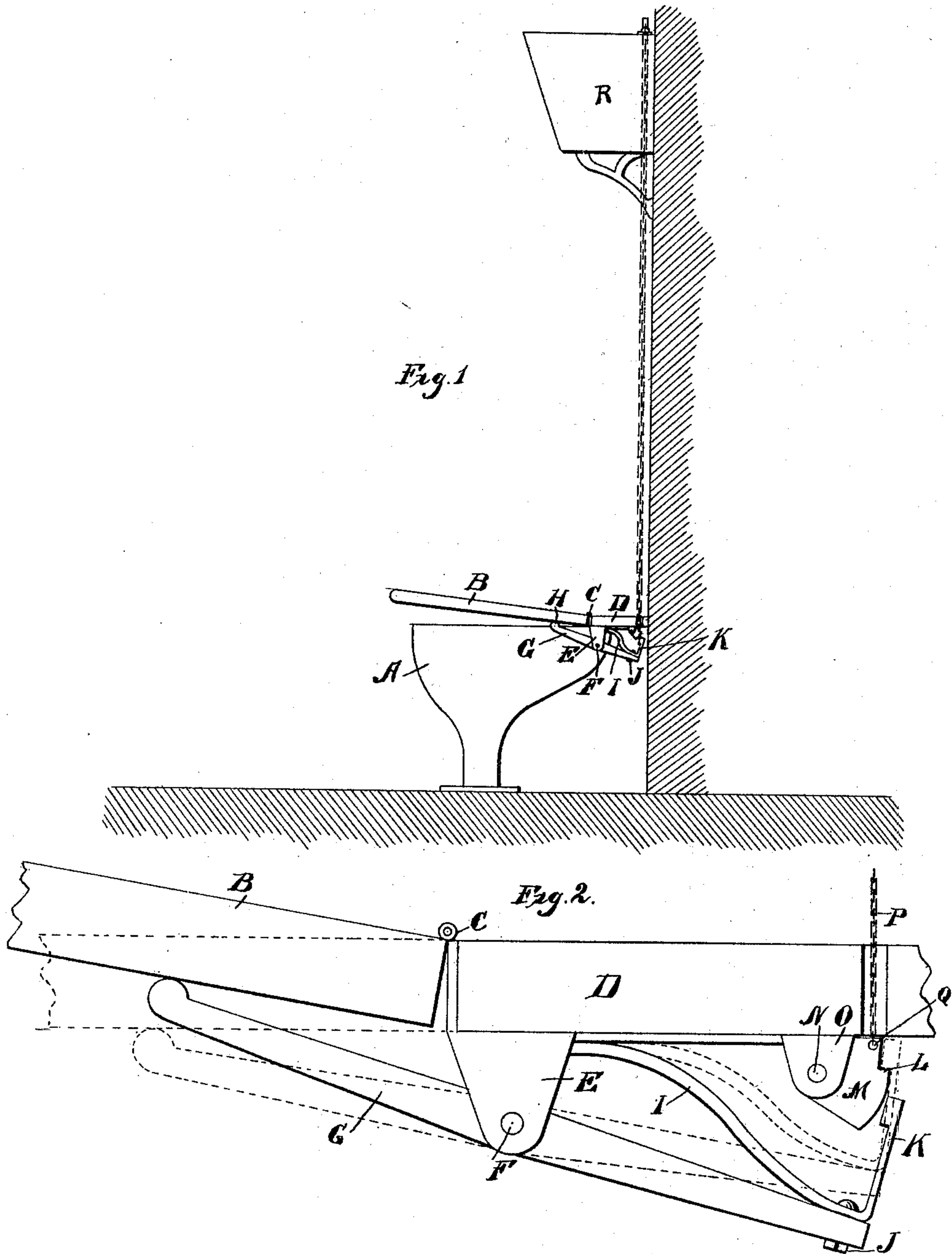
Patented Dec. 12, 1899.

A. E. SCHLIEDER.

ATTACHMENT FOR AUTOMATICALLY FLUSHING WATER CLOSETS.

(Application filed Nov. 8, 1897. Renewed Apr. 24, 1899.)

(No Model.)



Witnesses:

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UNITED STATES PATENT OFFICE.

AUGUSTUS E. SCHLIEDER, OF SIOUX CITY, IOWA.

ATTACHMENT FOR AUTOMATICALLY FLUSHING WATER-CLOSETS.

SPECIFICATION forming part of Letters Patent No. 638,888, dated December 12, 1899.

Application filed November 8, 1897. Renewed April 24, 1899. Serial No. 714,254. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTUS E. SCHLIEDER, a citizen of the United States, residing at Sioux City, in the county of Woodbury and State of Iowa, have invented a certain new and useful Improvement in Attachments for Automatically Flushing Water-Closets, of which the following is a specification.

My invention relates to a new and useful improvement in attachments for automatically flushing water-closets, and has for its object to provide a simple and effective device of this description which will without care bring about an automatic opening of the flush-valve to a sufficient extent to properly flush the closet and thereafter permit said valve to be closed in order that the flush-tank may not be unduly drawn upon.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth, and then specifically designated by the claim.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a view illustrating my improvement attached to a water-closet and connected with the flush-tank, and Fig. 2 an enlarged view of the automatic attachment for bringing about the opening of the flush-valve.

In carrying out my invention as here embodied, A represents the bowl, and B the seat thereto, which is hinged at C in the usual manner to the back board D or casing. Formed with the hinge-leaf is a right-angular extension E', which extends along the under side of the back board and has formed therewith the bracket E, which, depending downward, has pivoted thereto at F the actuating-lever G. The forward end of this lever extends outward and upward into contact with the under side of the seat, as clearly indicated at H, and is normally held in such a position as to slightly elevate said seat by means of a suitable spring I, here shown as a plate-spring, which is secured by a rivet or bolt at J to the rear end of the lever. Ex-

tending upward from this end of the lever is a catch K, which may be either formed with the spring or otherwise attached to the lever, and its hooked nose is adapted to engage with the notch L, formed in the trip-block M, which latter is pivoted at N to a suitable bracket O, formed at the other end of the extension.

A chain P is attached to the trip-block, as indicated at Q, and, extending upward, is attached to the valve mechanism by the flush-tank R, so that when the trip-block is swung downward this valve mechanism will be so operated as to open the valve, thereby causing a flushing of the bowl, as is well understood.

From this description the operation of my improvement will be obviously as follows: When the seat is depressed, the lever G will be caused to swing upon its pivot-point against the action of the spring I, thereby causing the hooked nose of the catch K to engage with the notch L of the trip-block, where it will remain until the seat is permitted to move upward by the action of the spring I, during which movement the catch will draw the trip-block downward, and this in turn will actuate the flush-valve mechanism, with the above-described results. In the downward swinging of the trip-block the shoulder L will pass through an arc of small radius, and in so doing will disengage itself from the hooked nose of the catch K, and when the block has been thus released it will return to its normal position by the action of the valve mechanism, thus permitting said mechanism to close the flush-valve and cut off the outflowing of the water; it being noted that the movement of the trip-block is so timed relative to the valve mechanism as to permit only a sufficient amount of water to flow out of the tank to accomplish the desired result, after which the said water will be cut off, as just stated.

I have here shown the bracket E as forming a portion of the hinge for securing the seat in place, and this has been found to be a very desirable construction.

One of the principal advantages of my improvement is its exceeding simplicity and the fact that it may be attached to any water-

closet having a flush-tank and bring about the desired results automatically and with certainty.

Having thus fully described my invention, 5 what I claim as new and useful is—

In combination, a hinged seat, a lever pivoted with one end engaging the seat, a spring attached to the opposite end of the lever and having one end engaging the back board and 10 the opposite end extending up and provided with a shoulder, a block having a cam edge terminating in a notch to engage the shoulder

of the spring, said block being pivoted to have a limited upward movement, and being so arranged as to be arrested while the spring is 15 traveling along the cam-surface, substantially as described.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

AUGUSTUS E. SCHLIEDER.

Witnesses:

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