No. 647,411. Patented Apr. 10, 1900.

G. M. JENKINS.

FLUSHING DEVICE.

(No Model.) (Application filed May 12, 1899.)

Fig. 1.

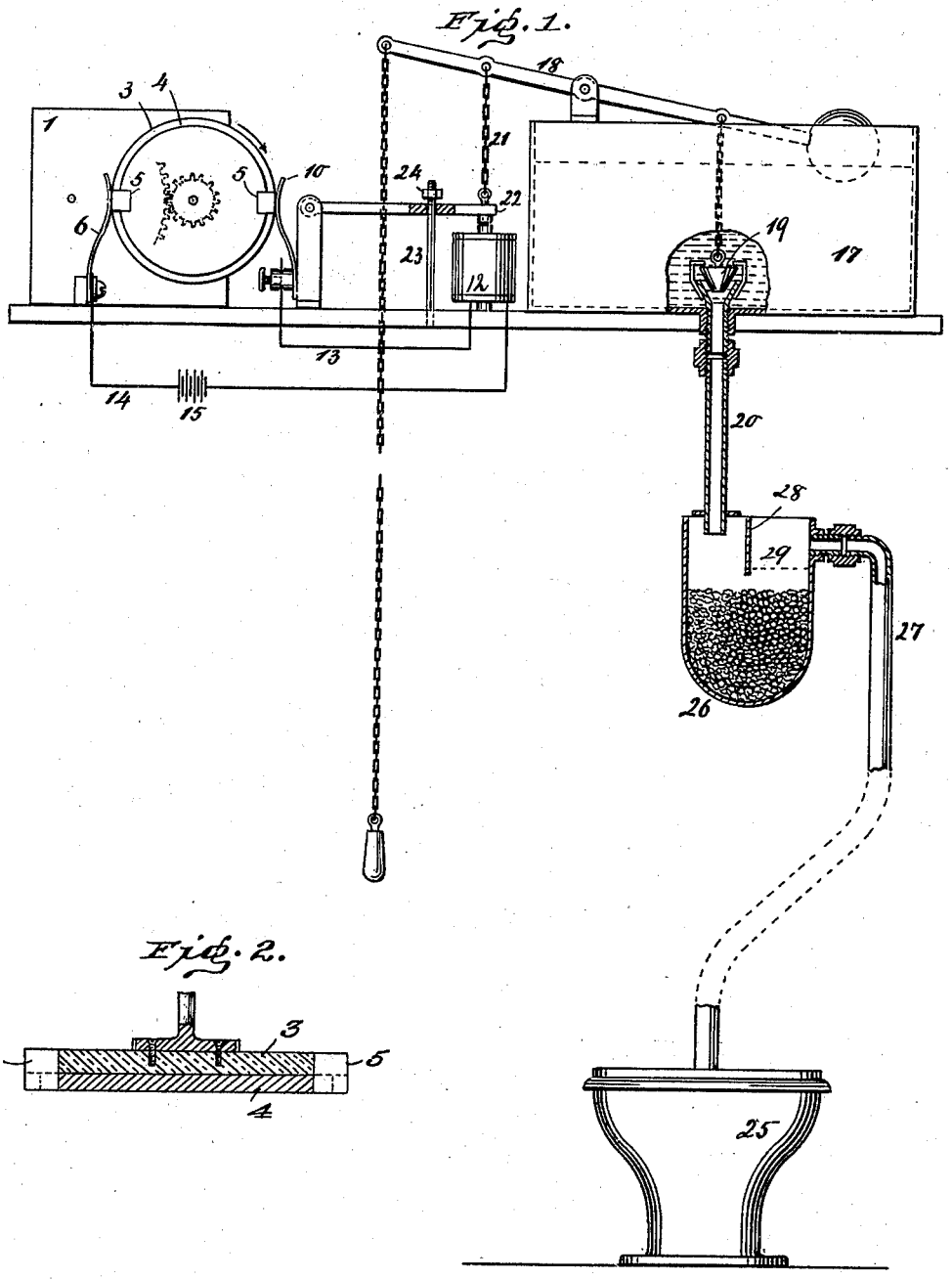

Fig. 2.

WITNESSES:

E. Wolff.

Chas. E. Bensinger.

INVENTOR:

Gertrude Moore Jenkins.

BY

Hauff & Hauff

ATTORNEYS.

UNITED STATES PATENT OFFICE.

GERTRUDE MOORE JENKINS, OF NEW YORK, N. Y.

FLUSHING DEVICE.

SPECIFICATION forming part of Letters Patent No. 647,411, dated April 10, 1900.

Application filed May 12, 1899. Serial No. 716,563. (No model.)

To all whom it may concern:

Be it known that I, GERTRUDE MOORE JENKINS, a citizen of the United States, residing at New York, borough of Manhattan, in the county of New York and State of New York, have invented new and useful Improvements in Flushing Devices, of which the following is a specification.

By means of this invention a water-closet, waste-pipe, or the like can be automatically flushed and also disinfected, as set forth in the following specification and claims and illustrated in the annexed drawings, in which—

Figure 1 shows a front elevation of the device. Fig. 2 shows a sectional view of a disk.

In the drawings is shown a tank 17, having a lever 18, which when suitably actuated will open the valve 19 to allow outflow through pipe 20. The lever 18 can be actuated by a link connection 21 with an armature 22, which is attracted by magnet 12 when vitalized by a current closed by suitable contact mechanism. The contact of this mechanism is effected automatically, as by clockwork 1, which rotates a disk, having the insulated portion 3, against one side of which is mounted the smaller brass disk or conducting portion 4. This conducting-disk 4 is not of as large diameter as the insulated disk 3; but at suitable spaces the brass disk 4 has projections or contact-blocks 5, which extend to the edge or circumference of the insulated disk 3 and are flush with the same. Two of these contact-blocks 5 are here shown; but any number may be applied. Along the rim of disk 3 4 extends a spring-contact 6, opposite which is another spring-contact 10. These contacts 6 and 10 may be secured to insulated portions or blocks of the clock mechanism or other support, while their other ends or free portions sit along the rim of disk 3. As the clock mechanism rotates disk 3 4 the contact-blocks 5 of the latter are brought in touch with the spring-contacts 6 10, so as to close the circuit and vitalize magnet 12 by a current flowing through conductors 13 and 14 from battery 15. When the magnet 12 releases the armature 22, the latter is prevented from excessive motion by a stop, such as rod or screw stem 23, having the nut or stop 24 screwed or adjusted thereon in proper position. The stem 23 passes through the armature to keep the latter in line with its magnet 12, even if the lever 18 is actuated by the hand-chain customarily applied and which is sometimes drawn in a slanting direction. The water flowing through pipe 20 can flush a bowl or the like 25.

The pipe 20, as shown, does not lead direct to the bowl. A receptacle 26 is shown for the reception of crystals or suitable disinfecting material capable of being dissolved by water. The pipe 20 enters at the top of receptacle or holder 26, and the pipe 27 leads from the upper part of this receptacle. A partition 28 causes the water entering at pipe 20 to strike or flow over the disinfectant before passing on through pipe 27. A screen 29 will prevent any undissolved disinfectant being washed or forced into pipe 27.

The disk 3 4 is readily formed by a disk 3, of insulating material, and a smaller conducting-disk 4, these disks both having recesses or seats in their rims, into which recesses the conducting-plugs are placed to contact with or sit into the conducting-disk. By driving disk 3 4 faster or slower or varying the number of contact-blocks the circuit can be closed at shorter or longer intervals, as required.

The device enables the water seal or U-shaped bend in the pipe to be kept unbroken in houses that are closed a certain time—say during the summer months—thus avoiding the objections arising from dry pipes or seals.

The holder 26 allows a certain quantity of the disinfectant or crystals contained therein to be dissolved before a flow of water through pipes 20 27 occurs.

The insulator-disk 3 can have a gear-wheel riveted or suitably secured thereto to mesh into the train of clockwork 1.

The link connection 21 between the armature can be nearer to or farther from the fulcrum of lever 18, as seen fit.

By making the disks 3 and 4 as plain or ordinary disks and making the plugs separate from the disks such disks are of simple construction and can have seats cut therein in such number and spacing as required and the required number of plugs placed in the seats.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a flushing-tank having an outlet at its bottom, a valve con-

trolling the outlet, and a lever connected with said valve and serving to open the latter, of two rotating disks of different diameter secured side by side and having recesses in their peripheries, the larger disk insulating and the smaller one conducting, means for rotating the two disks, a series of conducting-plugs inserted into said recesses flush with the periphery of the insulating-disk, contacts for said plugs, an electromagnet, a vertically-movable armature for the electromagnet, a connecting-link between said vertically-movable armature and said lever, and an electric circuit including the said contacts and the electromagnet, substantially as and for the purposes described.

2. The combination with a flushing-tank having an outlet at its bottom, a valve controlling the outlet, and a pivoted lever connected with the valve and serving to open the same, of rotary disks having peripheral recesses, one disk insulating and the other conducting, means for rotating the disks, a series of plugs inserted into said recesses, spring-contacts making contact with said plugs, an electromagnet, a pivoted vertically-swinging armature for the electromagnet, a link connection between said vertically-swinging armature and said lever, a stop for limiting the rising movement of the armature away from the electromagnet, and an electric circuit including said spring-contacts and said electromagnet, substantially as and for the purposes described.

3. The combination of a clockwork, two disks of different diameter rotated by said clockwork and having a plurality of peripheral recesses, the larger disk insulating and the smaller conducting, the plugs inserted into said recesses with their outer faces flush with the periphery of the insulating-disk, the two opposite spring-contacts for making contact with said plugs, an electromagnet, a pivoted vertically-swinging armature for the electromagnet, a stop device which acts to guide the armature and limit its rising movement away from the electromagnet, an electric circuit including said spring-contacts and said electromagnet, a pivoted lever, a link connecting the lever with the armature, and a flushing-tank having an outlet-valve flexibly connected with said lever, substantially as and for the purposes described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

GERTRUDE MOORE JENKINS.

Witnesses:

WM. C. HAUFF,

E. F. KASTENHUBER.