No. 624,569. Patented May 9, 1899.

E. C. STOVER.

FLUSHING APPARATUS FOR SANITARY OR OTHER FIXTURES.

(Application filed May 5, 1898.)

(No Model.)

Fig 1

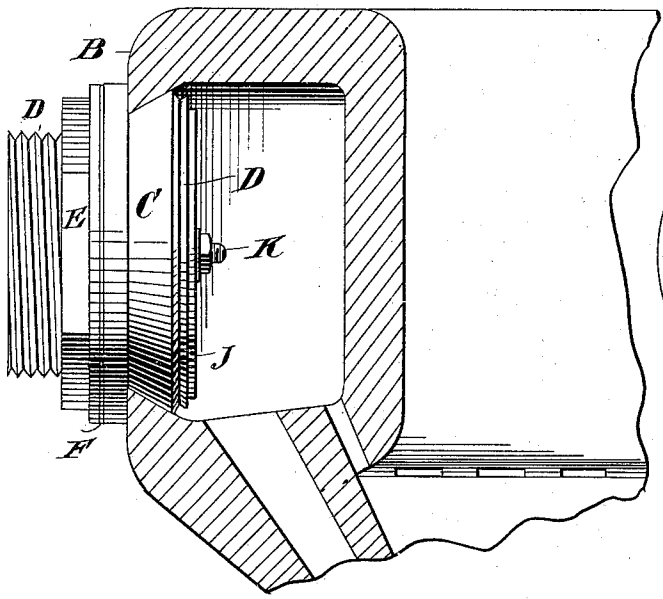


Fig 2

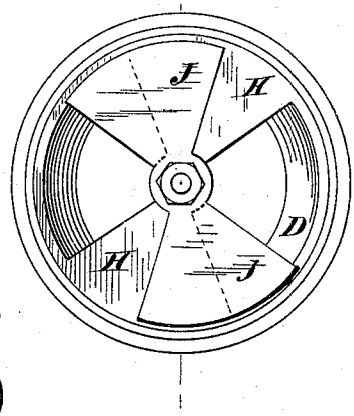


Fig 3

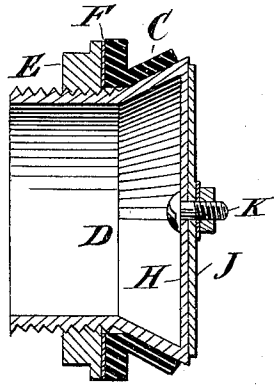
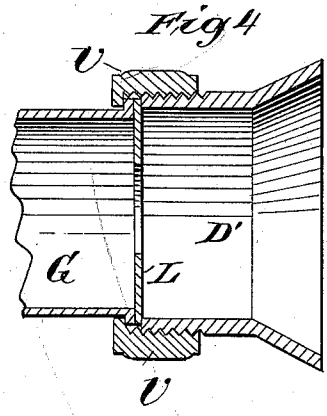
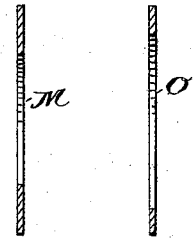


Fig 4





WITNESSES

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EDWARD C. STOVER, OF TRENTON, NEW JERSEY, ASSIGNOR TO THE TRENTON POTTERIES COMPANY, OF NEW JERSEY.

FLUSHING APPARATUS FOR SANITARY OR OTHER FIXTURES.

SPECIFICATION forming part of Letters Patent No. 624,569, dated May 9, 1899.

Application filed May 5, 1898. Serial No. 679,764. (No model.)

To all whom it may concern:

Be it known that I, EDWARD C. STOVER, residing at Trenton, in the State of New Jersey, have invented certain new and useful Improvements in and Relating to Flushing Apparatus for Sanitary or other Fixtures, of which the following is a description, referring to the accompanying drawings.

This improvement forms a regulating device for the flushing connection by which the action of the fixture may be improved and perfected. It is a well-known fact that in making siphon-jet closets of earthenware some closets, owing to the different shrinkage in the firing, will be more perfect in operation than others designed to be in all respects similar. In order to make these closets siphon properly, a sufficient quantity of water is usually provided for the jet-pipe and flushing-rim to make an objectionable noise during the operation of the closet. Any attempt to regulate this supply by decreasing the openings in the closet is dangerous, for the reason that to accomplish the desired object it is necessary to so restrict the openings in the earthenware that a number of closets intended to be alike will some of them work properly and some not work at all.

The present invention provides means for regulating and accurately adjusting the flow of water in the flushing connection to the closet, so as to compensate for any variation in the shrinkage of different closets in the firing and so as to thereby obviate the objectionable noise and perfect the action of the closet. It is often desirable to produce siphon-jet closets which will give a double-discharge action, whereas most closets now in use under high-pressure tanks give such a powerful jet as to empty the bowl and hold the water down in the throat of the closet during the entire discharge of the tank, which in itself increases the noise of the closet very materially. The present improvement accomplishes this object also by enabling the double discharge to be readily obtained by proper regulation of the water-supply.

The nature of the present invention will now be best understood by means of the accompanying drawings, wherein—

Figure 1 shows a flushing-pipe coupling provided with the improvement in side elevation, portions of the closet or other sanitary fixture and portions of the flushing-pipe being shown in section. Fig. 2 is a face view of my improvement, looking toward the mouth of the flushing-pipe. Fig. 3 is a central section of the same. Fig. 4 shows a modification.

Throughout the drawings like letters of reference indicate like parts.

I have selected for purposes of illustration a well-known form of coupling, to which my improvement is attached.

B illustrates the horn of a closet or other sanitary fixture, to which the flushing-pipe coupling may be secured by means of the rubber gasket C upon the connecting-sleeve D.

E is the follower-nut, and F the washer.

My improvement is restricted in no way to such details as I have mentioned, being applicable to almost every conceivable form of coupling. Secured to or incorporated with the coupling is a gate, diaphragm, or other water-regulating means. The means shown in Fig. 1 consist of a plate H, having sector-shaped openings, and a movable plate J, pivoted at the center K and adapted to move across and more or less close the openings in the plate H. In the form shown in Fig. 4 the coupling-sleeve is indicated at D′, and three diaphragms having openings of different sizes are shown at L, M, and O, respectively. The diaphragm L is secured to the sleeve D′ by the union-nut U, so as to regulate the flow of water through it. By selecting either of the interchangeable diaphragms M or O the flushing action may be regulated to a nicety, the diaphragm L being replaced by M or O. When the proper regulation has been once determined, no change need be made until the head of water or some other factor is changed.

The use and operation of my invention are as follows: When a number of fixtures apparently alike have been made and fired, my regulating flushing connection is applied to the fixtures and they are tested. The regulator is then adjusted until the most perfect and almost noiseless action is obtained. The fixture, with the coupling connection, is then ready to be shipped or put in use.

I claim as my invention the following:

1. The coupling, for sanitary fixtures, provided with means for securing the coupling to the fixtures, means for securing it to a flushing-pipe, and an adjustable regulator for the said coupling, substantially as set forth.

2. The coupling for sanitary fixtures, provided with a diaphragm or plate having openings therein for the passage of the flushing-water, and adjustable means for partially closing the said openings, substantially as set forth.

In testimony whereof I have hereunto set my hand, at Trenton, New Jersey, this 19th day of April, 1898.

EDWARD C. STOVER.

Witnesses:
C. E. LAWTON,
E. P. KNOWLES.