

(No Model.)

B. HAIGH.

APPARATUS FOR DISINFECTING CLOSETS, URINALS, &c.

No. 341,234.

Patented May 4, 1886.

FIG. 1.

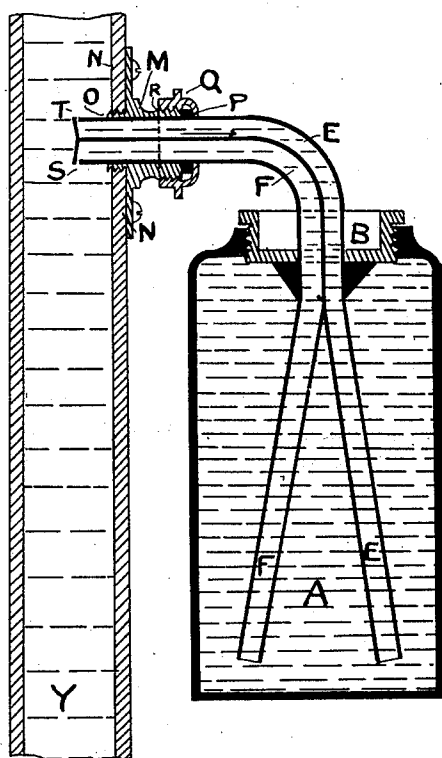


FIG. 2.

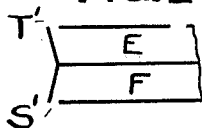
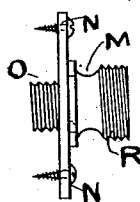


FIG. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

BENJAMIN HAIGH, OF BIRMINGHAM, ENGLAND.

APPARATUS FOR DISINFECTING CLOSETS, URINALS, &c.

SPECIFICATION forming part of Letters Patent No. 341,234, dated May 4, 1886.

Application filed August 12, 1885. Serial No. 174,321. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN HAIGH, of Birmingham, England, plumber, a subject of the Queen of Great Britain, have invented new and useful Improvements in Apparatus for Disinfecting Closets, Urinals, and for other such like Purposes, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention has for its object to provide novel means for supplying water with a disinfectant in its passage to a water-closet, urinal, or other place to be disinfected.

To such end the invention consists in the construction and combination of devices hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 is a vertical sectional view of the apparatus connected with the pipe which conducts the flushing-fluid to a water-closet or urinal; Fig. 2, a detail sectional view of the valved ends of the inlet and outlet tubes, and Fig. 3 a detail view of the coupling for connecting the apparatus to the fluid-conducting pipe.

In order to enable those skilled in the art to make and use my invention, I will now describe the same in detail, reference being made 30 to the drawings, where—

The letter A indicates the portable vessel for containing the disinfecting substance, which may be composed of permanganate of potash or other material. This vessel is provided with a screw-threaded mouth, receiving the screw-threaded cover B. The inlet and outlet tubes E and F are passed through an orifice in the cover, and, as shown, diverge at their inner extremities and terminate at a short distance from the bottom of the vessel, while the outer end portions of the tubes may be united together, and are turned laterally at right angles, or approximately so, to the vessel.

45 The letter Y indicates a pipe by which the flushing-water is conveyed to a water-closet, urinal, or other article to be cleansed and disinfected, and the outer end portions of the tubes are passed through the pipe. As here shown, the tubes are connected with the water-pipe by passing through a nipple, O, screwed into the pipe, and having lugs through

which are passed screws N, that engage the pipe. The outer end of the nipple is screw-threaded, and a collar, Q, is engaged therewith to clasp a collar, P, attached to the tubes upon the outer end of the nipple.

The outer extremity of each tube E and F is provided with a covering-flap, as at S T, which may, if desired, be composed of metal capable of being bent to enlarge or decrease the size of the orifices at the outer extremities of the tubes. By pressing the free edges of these flaps toward the outer extremities of the tubes the size of the orifices will be reduced, while by pressing such free ends of the flaps outwardly or away from the tubes the orifices will be enlarged. The proper adjustment of the flaps to insure a smaller or larger jet of disinfecting-fluid can be effected prior to the connection of the tubes with the water-pipe. The flaps are intended to project inside the water-pipe about one-quarter of an inch, (more or less,) so that whether the current of water be up or down, one flap acts as an injector into the disinfectant-vessel A, and the other as an ejector into the current of flowing water. The vessel being charged with the disinfecting material and connected with the water-pipe or other receptacle through which the water is caused to flow, a part of the latter will be injected into one of the tubes, as at E, by the flap T, and, entering the container, becomes impregnated with the disinfecting material. The impregnated water then passes through the outlet-tube F, and is by the flap S ejected into the current of water flowing to the water-closet basin or urinal. The disinfectant is thus mixed and discharged into the water-pipe every time the water-closet basin or urinal is flushed.

Having thus described my invention, what I claim is—

1. The combination, with the vessel A, for containing the disinfecting material, of the inlet and outlet tubes E and F, having their outer extremities provided with the injecting and ejecting flaps S and T, said tubes entering the vessel and terminating adjacent to the bottom thereof, substantially as described.

2. The combination, with the vessel A, for containing the disinfecting material, of the inlet and outlet tubes E and F, entering the vessel and provided at their outer extremities

with flexible adjustable flaps S and T, substantially as described.

3. The combination, with the vessel A, for
5 containing the disinfecting material, of the inlet and outlet tubes E and F, entering the vessel, and having their outer end portions extending laterally at right angles, or approximately so, to the vessel, and provided at their
10 outer extremities with the injecting and ejecting flaps S and T, substantially as described.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses.

BENJAMIN HAIGH.

Witnesses:

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