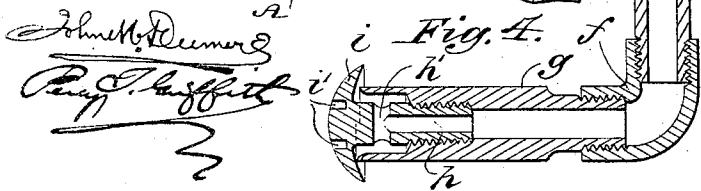
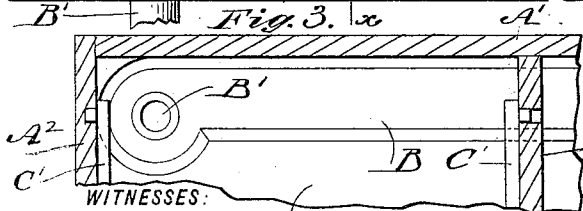
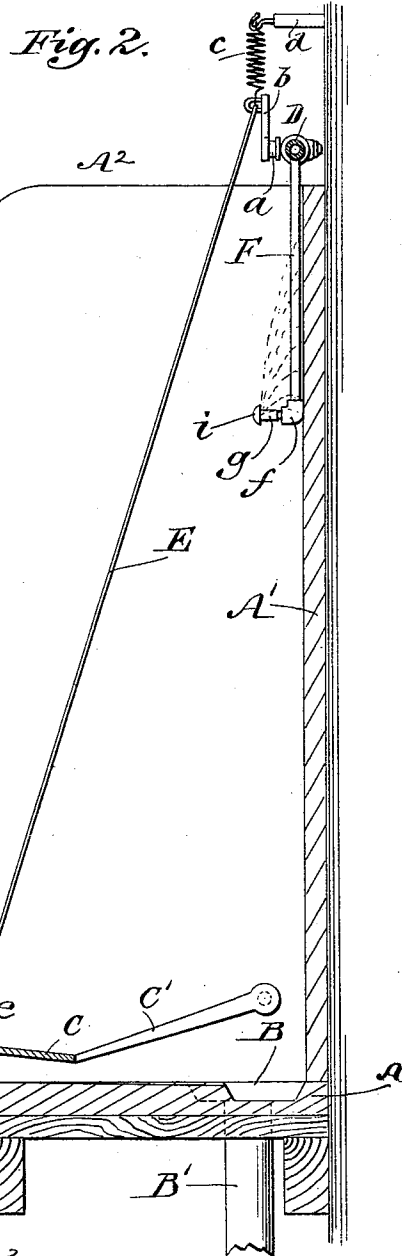
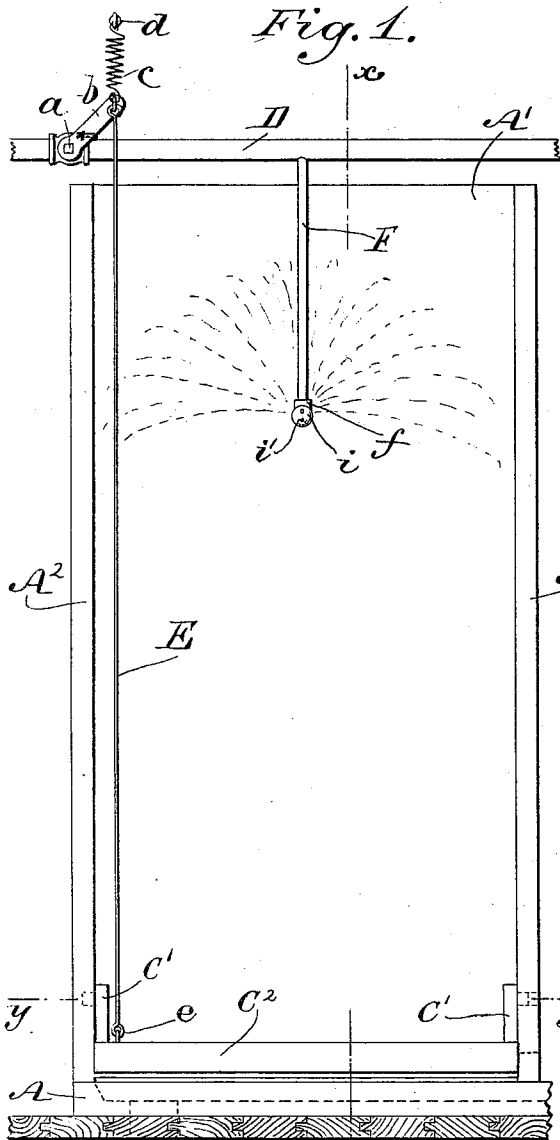


(No Model.)

S. J. PUTNAM.
URINAL.

No. 543,945.

Patented Aug. 6, 1895.



WITNESSES:

John M. Deane
Ray T. Hafford

INVENTOR

Samuel J. Putnam
BY *Edgar Tate & Co*

ATTORNEYS

UNITED STATES PATENT OFFICE.

SAMUEL JOSEPH PUTNAM, OF PRINCE'S BAY, NEW YORK.

URINAL.

SPECIFICATION forming part of Letters Patent No. 543,945, dated August 6, 1895.

Application filed September 26, 1894. Serial No. 524,150. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL JOSEPH PUTNAM, a citizen of the United States, and a resident of Prince's Bay, county of Richmond, and State New York, have invented certain new and useful Improvements in Urinals, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts in all the figures.

This invention relates to urinals, and has for its object to provide a simple, cheap, readily-constructed and perfectly-operating device of this character, which will be automatically flushed by the entrance thereto of the person using the same, a further object of the invention being to provide such mechanism as may also be attached to devices now in use.

The invention consists in the novel construction and arrangement of parts hereinafter more fully described.

In the accompanying drawings, Figure 1 is a front elevation of portion of a device of this character embodying my invention. Fig. 2 is a vertical cross-section taken upon the line $x x$, Fig. 1. Fig. 3 is a longitudinal section on the line $y y$, Fig. 1. Fig. 4 is an enlarged detail view of the ejector forming parts of the invention.

In the practice of my invention I construct a base A, having formed in the rear recess thereof a longitudinal trough B, toward which the base is inclined downwardly or sloping. At the end of the trough is an outlet-pipe B', and projecting upwardly from the base A are the rear walls A' and the partitions A².

Pivoted in each of the partitions A², near the rear, are arms C', upon the forward ends of which is secured, or formed integrally therewith, a platform C, projecting at angles to the arms to range below the pivotal point thereof, and having a depending flange C² at the front thereof.

Above the walls A' and A² is secured the water-supply pipe D, having a valve a , provided with a projecting bar or handle b , which is maintained normally raised and the valve thereby closed by means of the spiral spring c , secured to the end of the bar b , and to a

hook d , secured above the pipe D in the wall A³ of the room or otherwise.

Depending from the end of the bar or handle b , to which it is pivoted, is a rod E, pivotally secured at its lower end to an eye e upon one end of the platform C and of such length as to maintain the said platform normally in the raised position and slightly elevated at the front, so as to assume an exact horizontal position when depressed, as hereinafter set forth.

From the pipe D, midway of the partitions A², is suspended a branch pipe F, arranged against the rear wall A' and having an elbow upon the end thereof, on which is secured an ejector comprising a tube g , widened interiorly at the mouth and having screwed therein a tubular plug h , provided with a concave cap i , which bears against the tube g , except at the top, where the said tube is cut away slightly, as shown, to be open thereat.

Extending through the tubular portion of the plug h is an opening h' , the water-supply thus passing, when the valve a is opened, through the pipe D, the branch F, the tube g , the plug h , and by way of the opening h' into the mouth of the tube g , when it escapes between the said mouth at the top and the cap i , which said cap is provided with openings i' , in which an instrument may be inserted to unscrew the said cap in the event of the ejector becoming clogged.

The operation of the device will be readily apparent from the foregoing description, taken in connection with the accompanying drawings.

The person entering the urinal steps upon the platform C, the flange C² serving as a guard to prevent tripping, and the said platform, being depressed by the weight of the occupant, actuates the bar or handle b through the agency of the rod E to draw the said handle downwardly to the horizontal position, thus opening the valve a against the spring c , which permits the water in the supply-pipe D to flow through the branch F and the ejector, as hereinbefore described, and the said ejector being open at the top only the water is directed rearwardly against the rear wall A' in a semi-spherical or fan-shaped form, as shown by dotted lines in Fig. 1, thereby washing the

said wall and the trough or recess B, escaping therefrom by the outlet-pipe B'. As the base A slopes toward the said trough it will be observed that the same will be kept constantly dry and substantially clean.

I prefer to form the base and the several walls of slate or marble, and the platform C and arms C', I construct of a single metallic casting, preferably iron. I do not however

confine myself to these particulars. Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a device of the character described, an ejector secured against the wall thereof, comprising a forwardly ranging tube, a tubular plug therein opening into the mouth thereof, having a transverse groove extending there-through near its outlet, and having an integral interiorly concaved imperforate cap thereon, said plug being screwed into the tube, and the cap thereby secured against the mouth of the tube to close the same, the upper edge of said tube being cut out to permit the device to spray upwardly and rearwardly, substantially as shown and described.

2. In a device of the character described, an ejector comprising a threaded tube adapted to be secured to the water outlet, and having an interiorly enlarged mouth at the end thereof, and cut out at the top only, a threaded tubular plug screwed in the end of said tube and provided with a transverse groove extending therethrough and opening into the said tubular plug, whereby the water enters the enlarged mouth of the tube and an integral interiorly concaved imperforate cap formed upon said plug and secured against the edge of the tube, whereby it closes the mouth of the same at the bottom and partially closes said mouth at the top, to cause said ejector to spray upwardly and rearwardly, substantially as shown and described.

3. A device of the character described, comprising a base having a trough therein and upwardly projecting walls, a water supply pipe, a branch leading therefrom and opening above the trough, and an ejector thereon comprising a forwardly ranging tube, a tubular plug therein opening into the mouth thereof, and an interiorly concaved cap secured against the mouth of the tube and closing the lower half thereof only, whereby the ejector sprays semi-spherically upward against the rear wall of the device, a normally closed valve in the supply pipe, and means for closing the same, substantially as shown and described.

4. A device of the character described, comprising a base having a trough therein, toward which it slopes, and rear and side walls projecting upwardly therefrom, a water supply pipe above the walls, a valve therein having a bar or handle thereon normally raised by spring pressure to hold the valve normally closed, a branch pipe leading from the main pipe and opening above the trough, an ejector thereon held against the rear wall, open at the top only, and having an interiorly concaved head whereby it sprays semi-spherically upwardly against the rear wall when the valve is opened, a platform pivoted in the side walls and normally held above the horizontal plane, and a rod pivoted thereto and to the handle of the valve whereby when the said platform is stepped upon the valve opens, and the ejector is caused to operate, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 22d day of September, 1894.

SAMUEL JOSEPH PUTNAM.

Witnesses:

JESSE G. WINANT,
DWIGHT S. PARSONS.