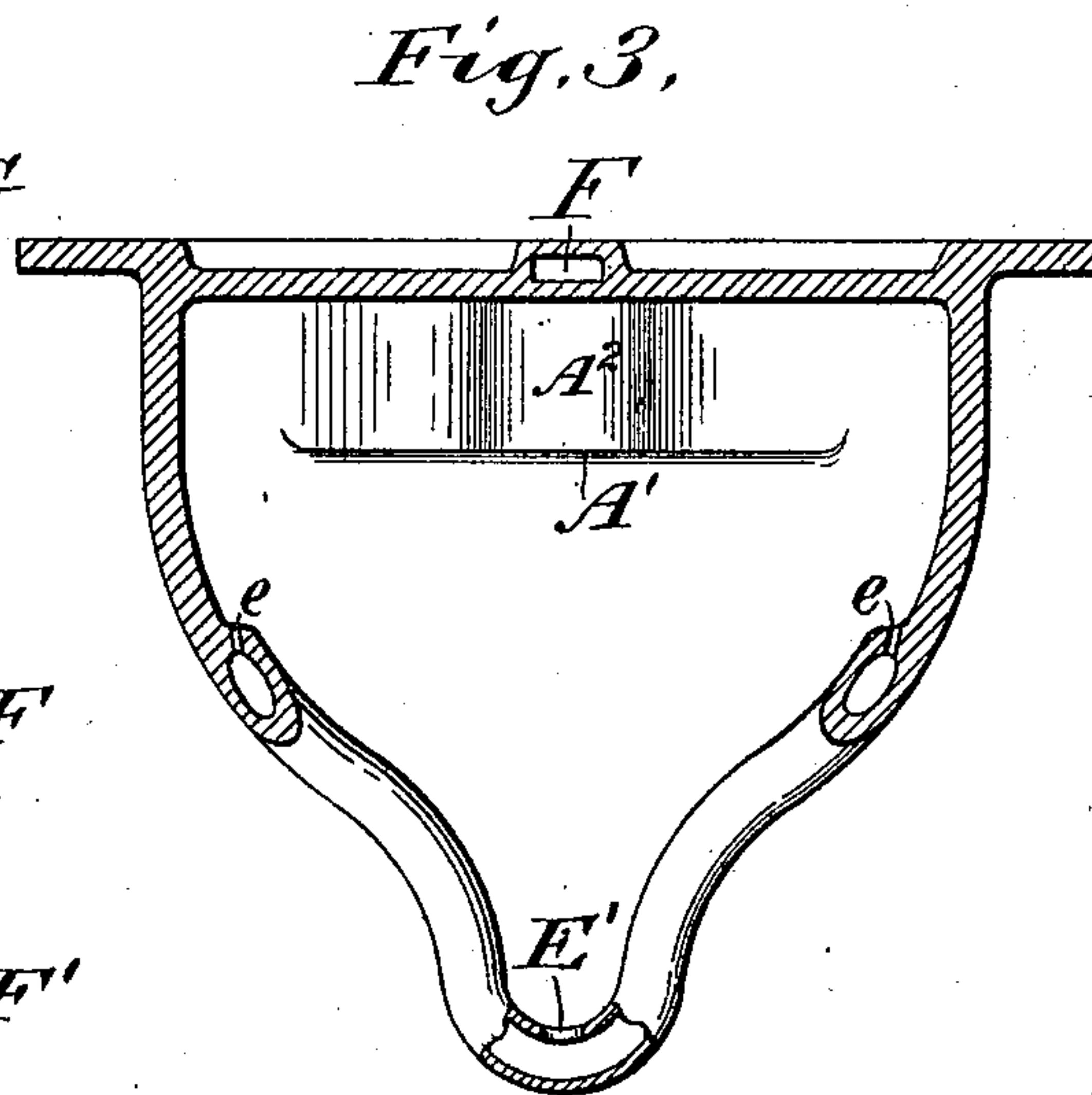
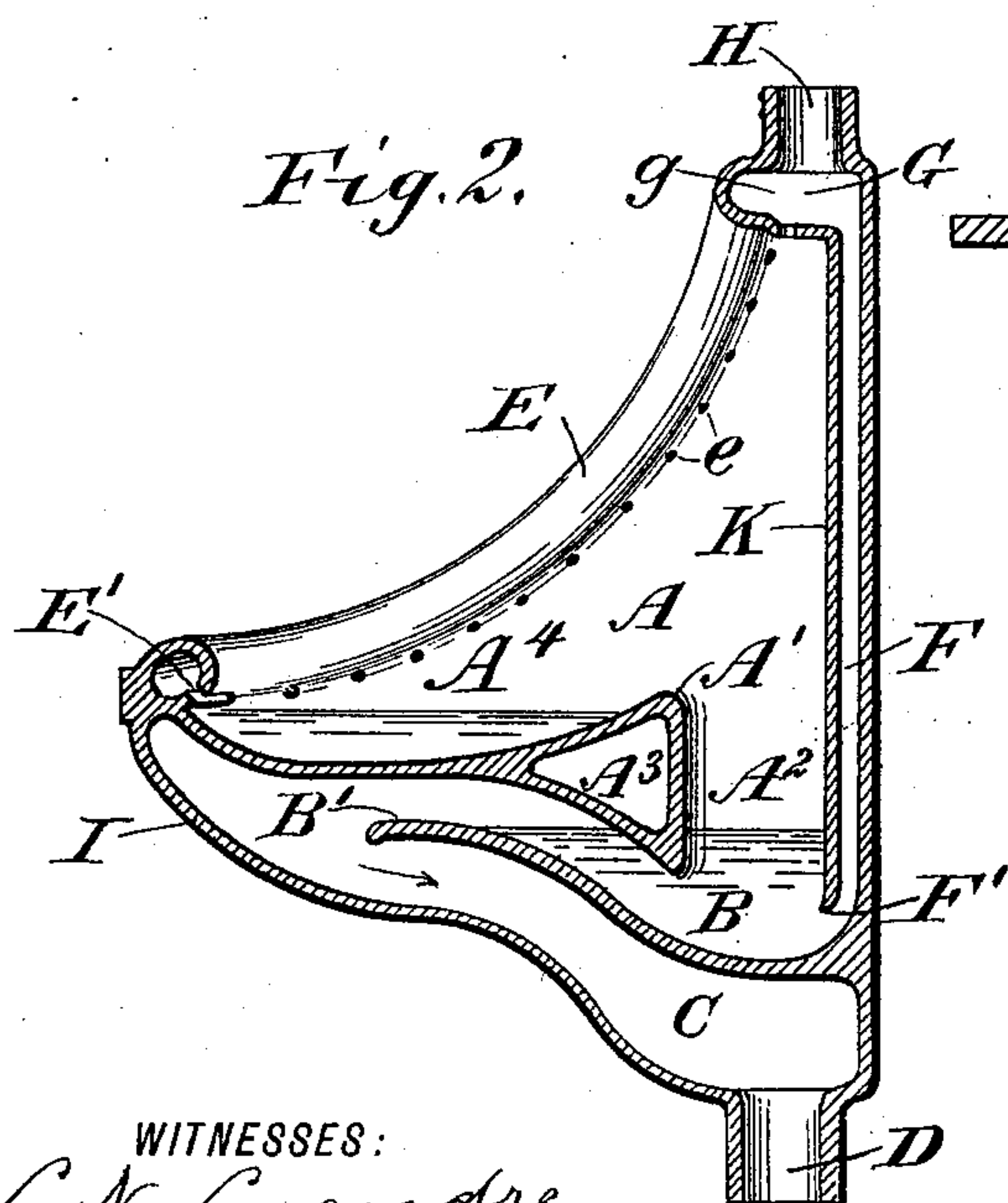
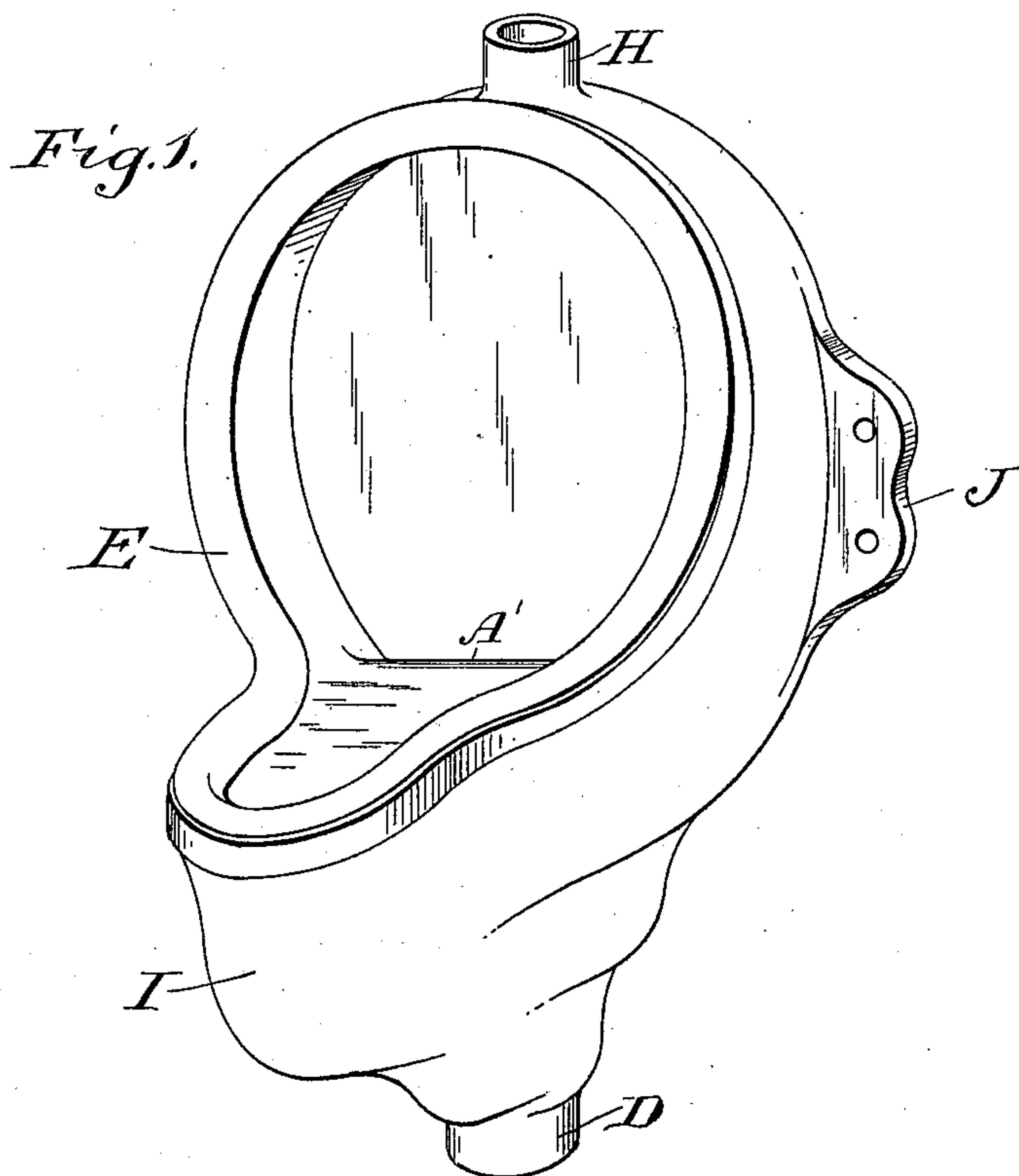


(No Model.)

T. H. HUTCHINSON.
URINAL PAN.

No. 602,080.

Patented Apr. 12, 1898.



WITNESSES:

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THOMAS H. HUTCHINSON, OF BROOKLYN, NEW YORK.

URINAL-PAN.

SPECIFICATION forming part of Letters Patent No. 602,080, dated April 12, 1898.

Application filed May 16, 1896. Serial No. 591,770. (No model.)

To all whom it may concern:

Be it known that I, THOMAS H. HUTCHINSON, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Urinal-Pans, of which the following is a full specification, enabling others skilled in the art to which it pertains to make the same.

My invention relates to urinal-bowls, and particularly to such as are provided with tanks or other water-supply as a means for flushing the bowl with water and thus removing the contents.

The objects of the invention are, first, to provide for so flushing the urinal-bowl that all danger of splashing on the clothing will be avoided, and, secondly, to provide an effective means whereby the bowl may be cleansed, and by its construction with a trap integral with the device prevent the odor from rising through the stand-pipe after the flush. These objects I accomplish by means of the device illustrated in the accompanying drawings, referred to herein, like letters referring to like parts in each figure thereof.

Figure 1 is a perspective front view of a urinal embodying my invention. Fig. 2 is a vertical section of the same through the line xx in Fig. 1. Fig. 3 is a transverse medial section through the line zz in Fig. 1.

The device is preferably made in the usual form of urinal-bowls with a projecting central front portion.

A represents the main bowl of the urinal, which is provided with a primary upper pan A^4 , having a dam A' . This dam is provided with a lip A^2 at its inner edge, which is reinforced by the brace A^3 and projects downwardly, the lower part dipping into the secondary and lower pan B—that is to say, its lowest point being below the level of the outer end or dam B' , so that when the pan B is filled with water the lip of the apron will extend below the surface thereof. This construction of the primary and secondary pans with the lower parts of the lip or apron of the primary pan dipping into the deeper portion of the secondary pan, the dam of which is higher than the lower edge of the apron of the primary pan, forms a complete trap when

the pan is in use. Fig. 2 illustrates this formation.

At about the center of the part where the secondary pan is joined to the rear wall and slightly above the level of the pan B is the orifice F' of the vertical flush-pipe F, through which the water in the said pipe is discharged into the secondary pan. This flush-pipe F discharges into the pan B at a point below the normal level of the water when the pan is in use. This flush-pipe communicates at its upper end with the supply-pipe H, which is made integral with the urinal and in the ware of the same, through the auxiliary chamber G, which has a series of perforations g at its lower part, through which when the flush takes place sufficient water is allowed to pass to cleanse the inner side of the rear wall of the bowl. The supply-pipe H also communicates through this auxiliary chamber with the hollow rim E, which is substantially of the ordinary flushing-rim construction, being provided with perforations e to admit of water passing through them and down the sides of the primary pan throughout its circumference on the inner side of the bowl. At the front part of the bowl A, at the point where the pan A^4 is joined to the rim E, there is a perforation E' , much larger than the others. This perforation E' is at a point where the streams from both sides of the rim meet, and it is adapted to flush the primary pan and force its contents backward and over the dam A' into the lower pan B, from whence it passes through the channel C into the discharge-pipe D.

The supply-pipe H and the discharge-pipe D are secured to the bowl in the ordinary manner, and the bowl is provided with perforated wing-flanges J J for the purpose of attaching it to the wall of a building.

The channel C is formed by the interstice between the pan B and the outer wall I of the bowl.

It will also be noted that when the trap is flushed the water, together with what matter may be contained in the upper dam, passes from the front to the rear, away from the person using the bowl, whereby the danger of the clothing of the latter becoming splattered is avoided.

The operation of this device is as follows: When it is desired to flush the bowl, the water is admitted through the supply-pipe H by any suitable means, such as a pull or cock, to the auxiliary chamber G, whence it distributes itself into either or both arms of the flush-rim E and flush-pipe F, a small portion of it passing through the perforations *g* in the bottom of the chamber and flowing over the inner side of the rear wall K. The water passing through the rim E is forced by the pressure through the perforations *e* and flows over the sides of the bowl into the pans A⁴ and B, while the jet of water issuing from the orifice E' flushes the pan A⁴, forcing its contents over the dam A' and into the secondary pan B. Simultaneously the water passing through the flush-pipe F forces itself through the orifice F', flushing the pan B and forcing its contents to overflow the dam B' into the channel C, whence it is carried off by the outlet-pipe D. When the water is turned off in the supply-pipe and the pressure thus removed, the water remaining in the rim E and the flush-pipe F settles into the pans A⁴ and B, the pan A⁴ overflowing, when it receives more than it can retain, into the pan B, and the pan B in turn overflowing into the channel C. All the contents of the two bowls are in this manner removed and replaced by clean water. It will be readily seen that when the water has thus settled the lower end of the lip A² will be immersed in the water of the pan B, where it forms a perfect trap, sealing the communication between the discharge-pipe D through the channel C and the upper parts of the bowl. This arrangement prevents any offensive odors from rising from the discharge-pipe.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The herein-described urinal-bowl having upper and lower pans integral therewith, said upper pan being designed to be flushed from the front toward the rear, and said lower pan being flushed from the rear toward the front, the forward portion of said lower pan being extended beneath the inner portion of said upper pan, a depending portion of said upper pan being beneath the level of the water of the lower pan, and an outlet with which said lower pan communicates, the rear wall of the bowl extending above the point where

the rearward flush enters, substantially as set forth.

2. The herein-described urinal-bowl, having upper and lower pans integral therewith forming passage-ways between themselves and between said lower pan and the bottom of the urinal, and an outlet into which said latter passage-way opens, said upper pan being flushed from the front toward the rear, and said lower pan from the rear toward the front, said upper pan being provided at its rear end with a depending portion which intercepts the water-level of said lower pan the rear wall of the bowl extending above the point where the rearward flush enters, substantially as set forth.

3. The herein-described urinal-bowl having an upper water-chamber, a depending pipe leading therefrom, a hollow rim also leading from said chamber and slotted at the front end of the bowl, upper and lower pans integral with said bowl, said upper pan extending from the front end of said bowl to near the rear wall thereof, and said lower pan extending from said rear wall to near the front wall of said bowl, said depending pipe opening onto said lower pan beneath the water-level thereof, and said upper pan having at its rear end a depending portion which intercepts the water-level of said lower pan, substantially as set forth.

4. The herein-described urinal-bowl having an upper water-chamber, a depending pipe leading therefrom, apertures being formed in the bottom of said chamber, a hollow rim also leading from said chamber and having a series of perforations facing the side walls of the bowl, and a slot at the front end of the bowl, upper and lower pans integral with said bowl, said upper pan extending from the front end of said bowl to near the rear wall thereof, and said lower pan extending from said rear wall to near the front wall of said bowl, said depending pipe opening onto said lower pan beneath the water-level thereof, and said upper pan having at its rear end a depending portion which intercepts the water-level of said lower pan, substantially as set forth.

THOMAS H. HUTCHINSON.

Witnesses:

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