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A. D. FULLER.
CLOSET.
APPLICATION FILED SEPT. 8, 1906.

Patented Mar. 8, 1910.
2 SHEETS—SHEET 1.

Fig 1

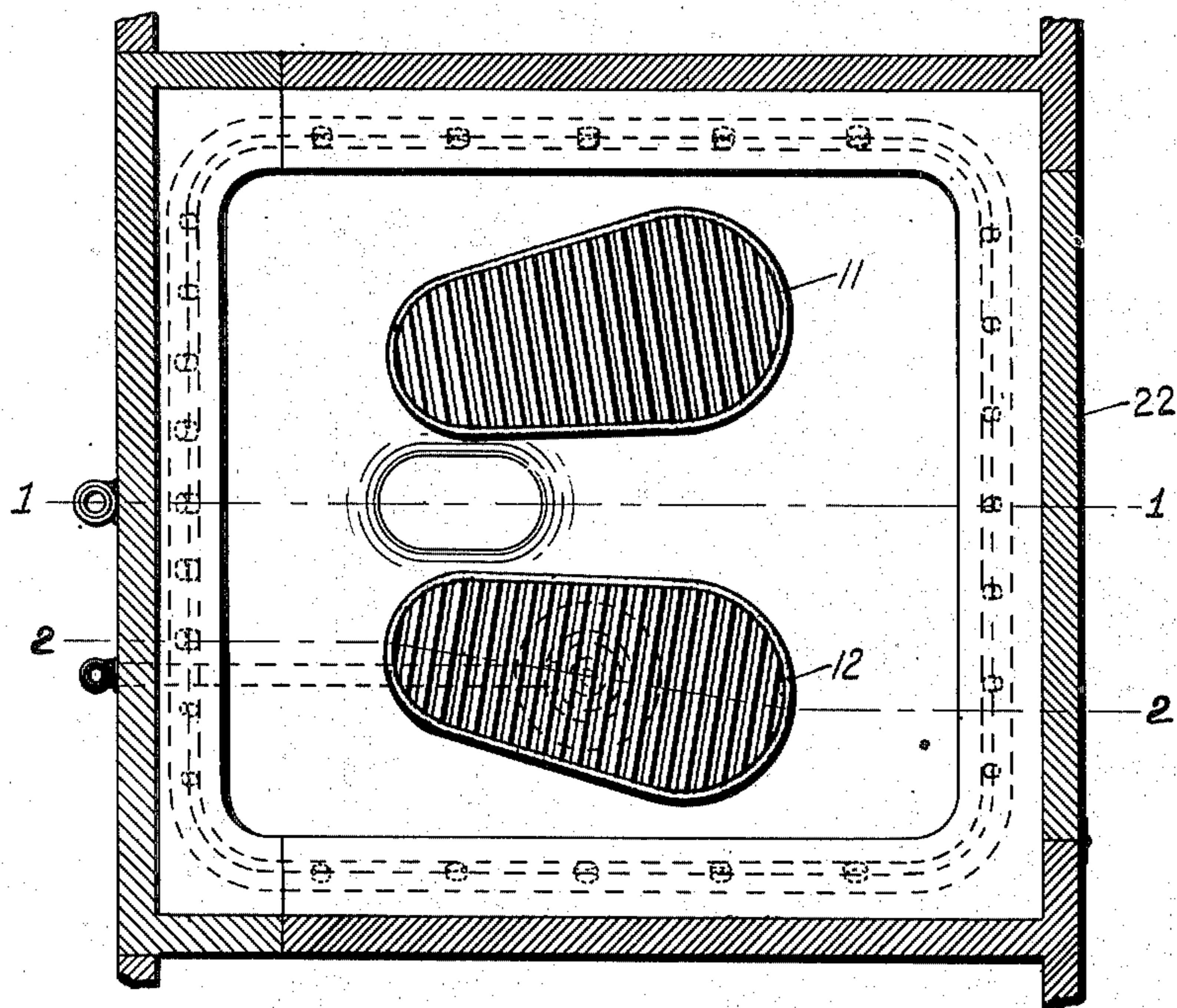
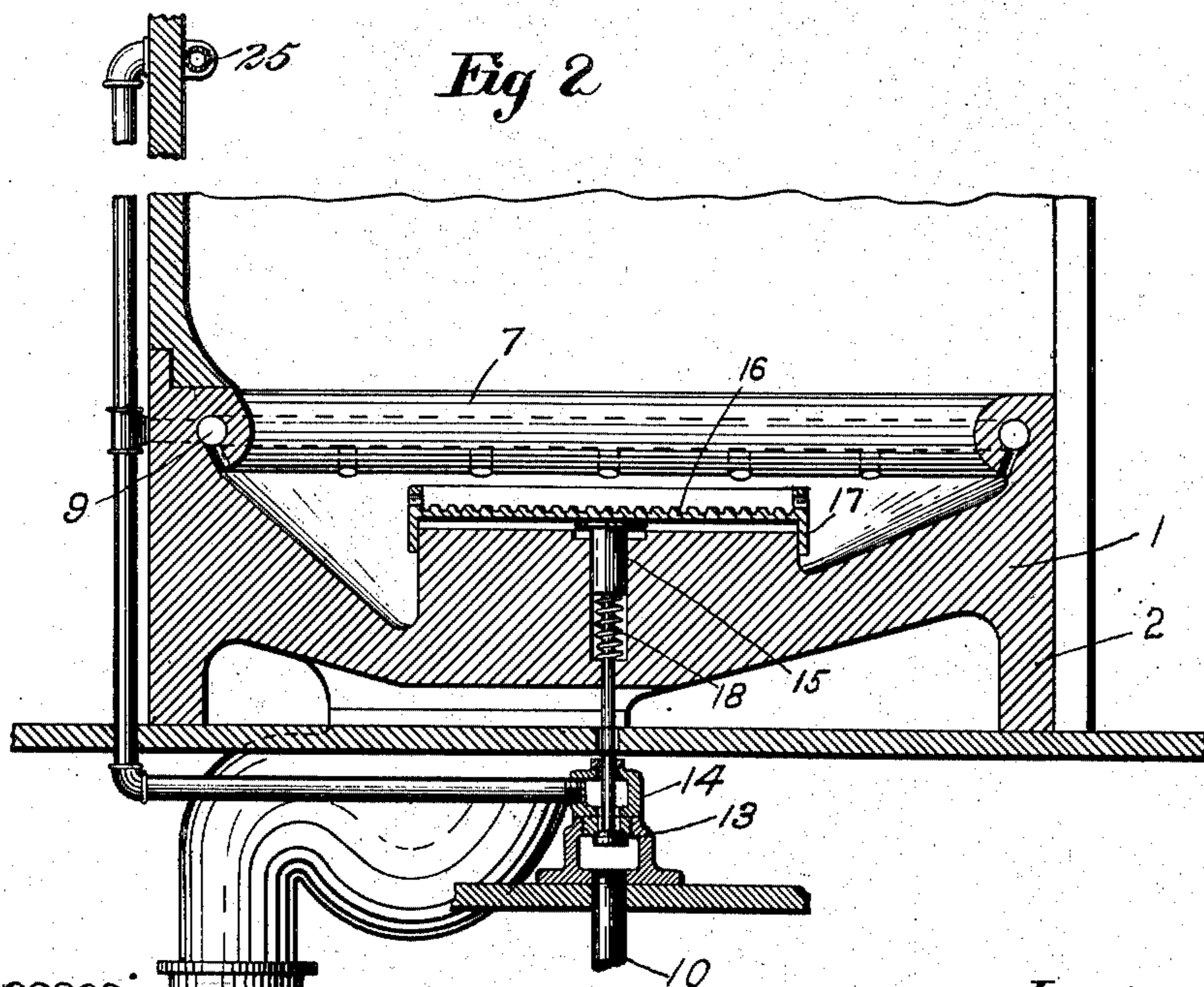


Fig 2



Witnesses:
Iwing H. Townsend
Jesse A. Holton.

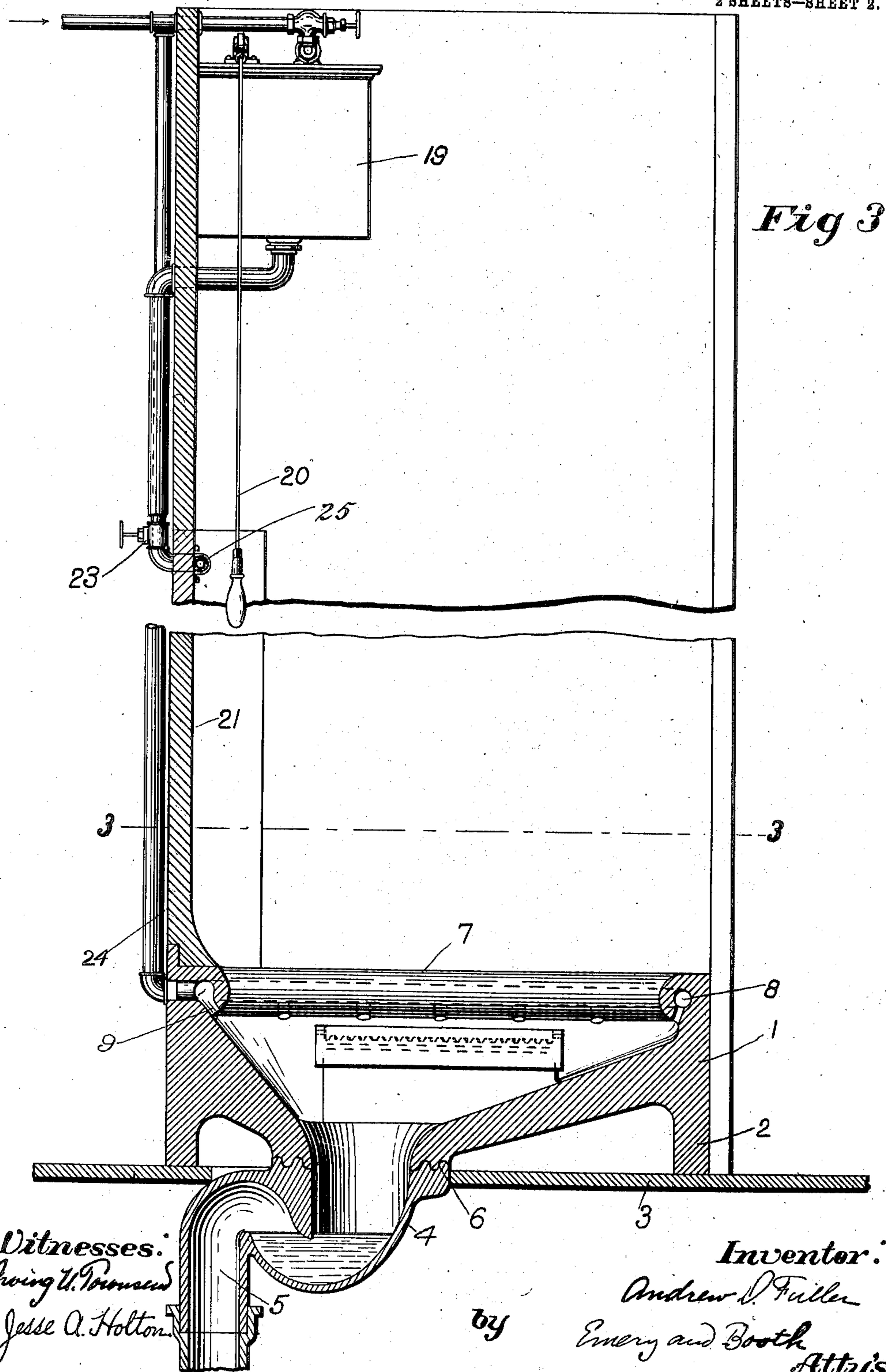
Inventor:
Andrew D. Fuller
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2 SHEETS—SHEET 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

ANDREW D. FULLER, OF WAKEFIELD, MASSACHUSETTS.

CLOSET.

951,604.

Specification of Letters Patent.

Patented Mar. 8, 1910.

Application filed September 6, 1906. Serial No. 333,413.

To all whom it may concern:

Be it known that I, ANDREW D. FULLER, a citizen of the United States, and a resident of Wakefield, in the county of Middlesex and State of Massachusetts, have invented an Improvement in Closets, of which the following description, in connection with the accompanying drawings, is a specification, like numerals on the drawings representing like parts.

This invention relates to water closets and to urinals and with regard to the former it more particularly relates to that type thereof in which the user assumes a squatting or stooping position. Such type of closet, however, is extremely objectionable without the provision of flushing or draining means therefor, which it is one of the aims of my invention to provide.

An object of that part of my invention relating to urinals, is to provide means for rendering the same clean and sanitary as by the provision of an effective flushing or drainage system which may be rendered thorough by including the flushing or drainage of the standing surface for the user or portions adjacent thereto.

In the type or embodiment of my invention herein presented Figure 1 is a horizontal sectional view upon the dotted line 3—3 of Fig. 3, of a closet having my invention applied thereto; Fig. 2 is a vertical sectional view upon the dotted line 2—2 of Fig. 1, and Fig. 3 is a vertical sectional view of the closet upon the dotted line 1—1 of Fig. 1, and for convenience of illustration showing in the same figure a urinal having one type of my invention applied thereto.

Having reference to that type or embodiment of my invention herein presented to disclose the principles of my invention, the base or feces receiving surface is represented at 1, it being of any suitable material, but preferably formed of an impervious material such, for example, as vitrified china, porcelain, slate, enameled iron, etc. The said base is preferably integrally cast and is herein shown as having a depending lower edge 2, whereby it may be received upon the flooring or other support 3, and suitably communicating with the plumbing system, to which end it is herein shown as having therein an opening for the discharge casting 4 of the closet

communicating in any preferred manner as by the outlet 5 preferably with a plumbing system, such casting 4 being of any suitable material such, for example, as enameled iron. Any preferred manner of uniting the feces receiving base with the discharge casting may be employed. In the present embodiment of the invention the two are shown as having a dovetailed connection 6.

I contemplate the employment of means for flushing the feces receiving surface and to that end may employ any suitable arrangement of devices whereby the same may be flushed either during the use of the closet or at any proper period before or thereafter. As a preferred means to flush the said surface I have, in this embodiment of the invention, shown the feces receiving casting 1 as provided at a suitable point with a flushing rim 7, having therein an encircling water supply passage 8 provided at suitable intervals with discharge openings 9 and communicating with a source of water or flushing medium supply which is shown in Fig. 2 as located beneath the flooring at 10 and communicating by suitable pipes with the flushing rim. The flushing rim, if this type of flushing means be employed, may if desired be in open communication with the source of water supply or a valve may be provided to be operated either automatically or otherwise.

In order that the closet may be used by one when assuming a squatting or crouching position, I contemplate the employment of a foot support or supports so located with reference to the feces receiving surface that the body of the user when crouched upon the said support or supports may be properly presented with regard to the said surface. In the present type of the invention I have shown separated foot supports 11 and 12, as clearly shown in Fig. 1, the user assuming the proper position thereon preferably with his face to the right viewing Fig. 1. While a single foot support may be used, I preferably employ two, as shown, and while the same may be located in any proper position relative to the feces receiving surface to permit the described operation of the closet, I preferably locate the said support or supports within the boundary of the flushed or drained area of the said feces receiving surface. The said foot supports are herein shown as forming an integral part of the

casting 1 but they may be otherwise formed and secured in any desired manner. They are also preferably, as shown in Fig. 2, raised from the face of the said surface, which is herein shown as sloping downward from all sides to the discharge outlet or outlets. The upper surface of the foot support or supports may be fashioned in any desired manner but are herein shown as corrugated or roughened to provide a firmer foothold. If desired, and as here shown, the said foot supports may have upstanding surrounding rims preferably perforated and be faced with some preferably rough material, such as rubber, waxed fiber, or the like, to secure easier and firmer footing, and may be provided with depending guiding rims as shown. The upturned perforated rims protect the foot-rests against the splashing of water while the perforations permit them to be flushed and drained when desired and thereby kept clean and sanitary. The location of the foot-rests so as to be entirely surrounded by the flushed and drained area keeps them and adjacent surfaces clean and free from all foulness. If desired, removable foot pieces, impervious or otherwise, may be provided for the foot receiving surfaces.

In order to drain or flush the feces receiving surface water or other flushing medium may be supplied in any desired manner to any suitable form of flushing device. To render the closet thoroughly sanitary, I preferably employ means whereby the closet may be flushed while in use, either by a constantly flowing stream of flushing medium or by automatic or other means for flushing during use of the closet. When a flushing rim is employed, as herein shown, I preferably provide automatic means for flushing the surface, though it is obvious that a constantly flowing stream may be employed, and as a type of such flushing means have herein shown a valve 13, preferably located in a suitable valve casing 14, preferably connected with the water entrance pipe 10, the valve stem being shown as extended upward and receiving upon the upper and preferably enlarged end 15 thereof the vertically movable valve operating member 16 which may be provided at any suitable or convenient point, but which I have herein shown as located upon one of the foot supports, as having a depending flange 17 and as normally spaced above the foot support by a suitable coiled spring 18, surrounding the valve stem and normally acting to hold the valve in a closed position. I may employ any desired type of valve and may locate the same at any suitable or desired point. In the described construction the flushing will continue so long as the user maintains his position upon the foot supports but if desired any other form of flushing device, whether automatic or otherwise, may be employed

and to that end in Fig. 3 is represented as a single type thereof, a flushing tank 19, having a depending chain or other operating means 20 by which the flushing medium may be supplied to the flushing rim 7 or in any other suitable manner to the feces receiving surface or any desired portion thereof. While the flushing medium may be applied to only a limited portion of the feces receiving surface yet I preferably supply the entire area of said surface therewith in order to keep the closet in a sanitary condition and to this end the flushing rim is shown in Fig. 1 as entirely encircling the receiving surface.

If desired, the water closet may be used also as a urinal and to that end any suitable urinary apparatus may be provided, but in this embodiment of the invention I contemplate the use of one wall of the closet for urinary purposes and (Figs. 2 and 3) have shown the wall 21 as adapted for that purpose, the same being preferably and as herein shown opposite the door 22 of the closet so that the user stands upon foot supports 11 and 12 and facing in an opposite direction to that assumed when using the closet as such. In order to facilitate the use of the device as a urinal when the latter is located as herein shown, the foot supports 11 and 12 may be placed in parallel position instead of slightly diverging as shown so as to adapt the same for convenient use for either purpose.

It is apparent that a urinal of the type shown or of any other desired type may be used independently of the closet, that is, that it is capable of general use as a urinal. In that type of urinal wherein a vertical wall is employed, as well as in that type of urinal known as the "attached wall urinal," wherein a bowl is suitably secured to a wall, it is a common practice to flush or drain the wall or the bowl or attached wall type of urinal as by a horizontally disposed pipe placed a suitable distance above the lower edge of the wall or above the receiving surface of the bowl or attached wall type of urinal, from which water constantly flows down its urine receiving surface. This type of urinal is objectionable for one reason in that the flooring in the vicinity of the urinal becomes foul and unsanitary in spite of the flushing referred to, the water employed for which is generally conducted off by a narrow trough at the base thereof. Again, urinals of every type are liable to become foul and unsanitary at the base thereof because of the lack of adequate flushing means. But especially and in order that a urinal of the bowl or attached wall type, or any other suitable type, may be thoroughly sanitary it is highly desirable that the surface thereof may be wet with a flushing medium when used and that the urine be not received upon a dry surface. The after flushing of the

used surface does not result in a sanitary urinal. To overcome the above enumerated and other objections, and in order to render the urinal thoroughly sanitary, I herein not only flush the standing surface for the user of a urinal, or parts adjacent thereto, but I also flush the receiving surfaces of the urinal, of whatsoever type employed, in such a manner that the said surface is wet with a flushing medium when the urine is received thereon, in contra-distinction to permitting the urine to be received upon an otherwise dry surface which is afterward flushed. In the present embodiment of the invention I contemplate accomplishing this object by automatically flushing the receiving surface of the urinal as the same is used. Thus in applying my invention either to a urinal of the bowl or attached wall type or to the type of urinal herein shown, I preferably not only flush the urine receiving surface as the urinal is used, and preferably automatically through the foot of the user, but I preferably flush the base or standing portion for the user in the vicinity of the wall serving as a urinal or whereon the urinal is attached, preferably providing in the flushed area of the base or closely adjacent thereto suitable and preferably non-flushed foot supports. By this arrangement the urinal and its surroundings are kept in a sanitary condition. In flushing adjacent surfaces, I may employ a constantly flowing stream of flushing medium, or may employ automatic or other means for flushing such surface or surfaces at intervals, but I have herein shown means for automatically flushing the same during use.

In the illustrated embodiment of my invention, the automatically controlled flushing pipe (Fig. 2) leading to the flushing rim 9 has an upwardly leading extension having suitable connection with the horizontal perforated pipe 25 located at the front of the urine-receiving wall 21 so that the automatic flushing of this surface at the time of its use is secured. It will be seen that, while this provides for the sanitary flushing of the urine-receiving wall while it is in use, the water is automatically shut off at all times when the urinal is out of use. If desired, the constant supply of flushing water referred to may be applied to the wall 21 through the tank supply pipe which latter is provided with a downturned portion (Fig. 3) connected to the perforated pipe 25 through the valve 23 by which it may be shut off or turned on as desired.

The closet is preferably provided with four inclosing walls, as shown in Fig. 1, one of which is herein designed as a urinal, the wall 21 adapted for this purpose having an overlapping rim 24 either at its lower edge only or upon the sides also, to afford a sanitary connection between the same and the

receiving portion thereof which in the present type of the invention is shown as the upper edge of the feces receiving casting 1. It is apparent that in the use of the combined water closet and urinal although a common outlet is shown yet different outlets may be employed if desired.

Having thus described one type of embodiment of my invention and the principles of use thereof, I wish it to be understood that although I have described the same specifically yet the descriptive terms are used in their generic sense and not as a matter of limitation and that the invention is set forth in the following claims.

Claims:

1. A water closet having an outlet, a feces receiving receptacle communicating therewith, a foot support located within said receptacle to permit use of the closet in a squatting position, and automatic means for flushing said receptacle dependent for its operation on the use of said closet.

2. A water closet having an outlet, a feces receiving receptacle communicating therewith, a foot support for the user located within the limits of said surface, and means operatively connected with said foot support for automatically flushing said receptacle.

3. A water closet having an outlet, a feces receiving surface communicating therewith, means for supplying a flushing medium to said surface, a foot support located with relation to said surface to permit the use thereof in a squatting position, a valve for controlling the discharge of said flushing medium, a normally elevated plate mounted upon said foot support and adapted to be depressed by the user to open said valve.

4. A combined water closet and urinal having an outlet, a feces receiving surface communicating therewith, means for draining said surface, a foot support within the limits thereof and an upright urinary surface also in communication with said outlet.

5. A urinal having a draining area, foot-supporting means within the draining area, flushing means for the drained area and means controlled by the foot-supporting means for operating said flushing means whereby the said area is flushed during the use of the same.

6. A urinal having a draining area, foot-supporting means within said area, a urine-receiving surface and flushing means both for the draining area and said urine-receiving surface automatically operated by said foot-supporting means.

7. A urinal having a drainable area, foot-supporting means thereon, and means for automatically flushing the said area about said foot-supports during the time that the latter are occupied.

8. A urinal having a foot-support, means
upon which the same is mounted for sliding
movement to an elevated or depressed posi-
tion, said support having a close, sliding fit
upon said means for the exclusion of for-
eign matter and automatic flushing means
connected to be operated by said slidable
foot-support.

9. A urinal having a drainable area, foot-
10 supporting means entirely surrounded by

said drainable area and automatic flushing
means connected to be operated by said foot-
supporting means.

In testimony whereof, I have signed my
name to this specification, in the presence of 15
two subscribing witnesses.

ANDREW D. FULLER.

Witnesses:

THOMAS B. BOOTH,
ARTHUR E. CARSON.