

(No Model.)

C. H. MOORE.
WATER CLOSET.

No. 582,827.

Patented May 18, 1897.

Fig. 1.

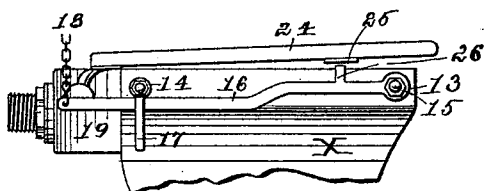


Fig. 2.

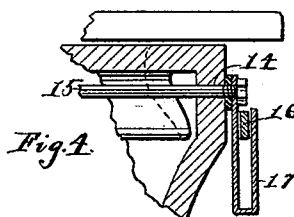
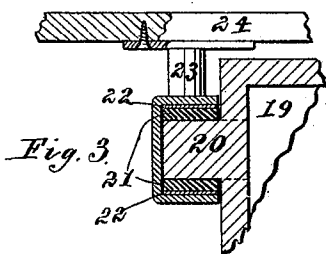
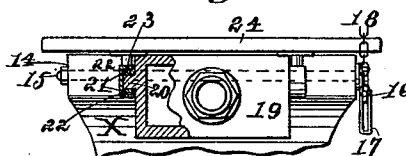
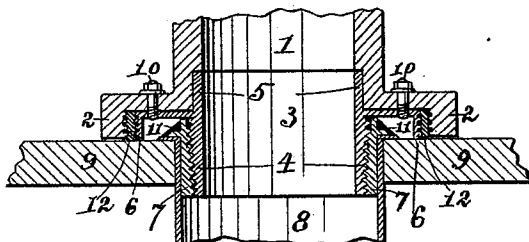


Fig. 5.



WITNESSES:

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WATER-CLOSET.

SPECIFICATION forming part of Letters Patent No. 582,827, dated May 18, 1897.

Application filed October 29, 1896. Serial No. 610,471. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. MOORE, a citizen of the United States, residing in the city, county, and State of New York, have invented a new and useful Improvement in Water-Closet Apparatus, of which the following is a specification.

The object of this invention is principally to provide a water-closet that can be screwed to the soil or sewer pipe in the same manner that an ordinary threaded metal pipe is screwed to a female-threaded fitting. To accomplish this, I use a recessed flange on the closet and a metal fitting secured therein similar to that shown in my Patent No. 574,339, dated December 29, 1896; but I use a threaded depending end in this invention, and therefore it is an improvement on the above-named invention, as it is modified to an extent to produce a different function.

It is likewise my object to secure a seat directly to the earthenware in a simple and strong manner and to secure the lever that operates a valve in the cistern directly to the closet.

In the accompanying drawings, forming a part of this specification, Figure 1 is a side view of the top portion of a closet. Fig. 2 is a rear view of the same. Fig. 3 is a central vertical section of a portion of the chamber or receptacle and the seat-hinge connection. Fig. 4 is a section of the bowl, showing a rod extending through the flushing-rim. Fig. 5 is a central vertical section of the discharge end of a closet, showing the fittings 3 and 7 secured to the closet and soil-pipe 8.

X represents an earthenware water-closet, which can be of any character and shape, but is herein shown square at the top.

1 shows the discharge end of a closet.

2 is a recessed flange corrugated on the inner surface either in a vertical or horizontal direction, or both, so that lead, which I purpose using, can be calked into the furrows to hold the metal fitting to the earthenware absolutely firm and make a gas-tight joint.

3 shows a metal fitting shaped about the same as the recessed flange 2 and adapted to fit into it and having the outer edge furrowed and an end 4 threaded to correspond with the thread in the fitting 7 and to screw into the said fitting and form a tight joint. By

preference I extend the fitting 3 up into the discharge end of the closet, as shown in Fig. 5.

8 is a lead pipe flanged on the floor 9, and 10 are bolts to hold the fitting 3 rigid.

11 represents a solder-joint, and 12 is a calked lead joint between the metal fitting 3 and the earthenware; but cement can be substituted for the lead filling, if desired.

13 shows an aperture made through the walls of the closet at the front, and 14 is an aperture at each side of the closet at the back portion. A rod 15 passes through the flush-rim at the front and a similar rod passes through the flush-rim at the back of the bowl. A lever 16 is hinged to the rod which extends through the front of the closet, and it is held in position against the closet at the rear by being confined in a slotted fitting 17, the upper end of which is put on the rod 15 against a soft washer, and when the nut shown on the outside of the fitting 17 is screwed up the fitting 17 is secured rigidly to the closet and the lever 16 operates vertically in the slot shown therein and from which it cannot get displaced.

18 is a chain leading to the tank.

19 is the water inlet or chamber at the rear of the closet; but instead of making it in the usual round shape I form the vertical sides so that the pintles that the hinges operate on can be made of earthenware and integral with it. These pintles 20 are about one inch long and one inch in diameter.

21 represents rubber rings on the pintles 20.

22 shows brass ferrules on the outside of the rubber rings; but they may be made a suitable size and put on the inside of the rubber rings, if it is found desirable.

23 represents hinges secured on the pintles 20 and screwed to the seat 24.

25 is a metal plate secured to the under side of the seat for the pin 26 of the lever 16 to press against.

To secure the fitting 3 to the closet, first turn the closet bottom side up and rest the top of it upon a level plane. Then put a layer of red or white lead or other suitable cement on the bottom surface of the earthen flange 2 and apply melted resin or something of a like nature to the side of the said flange. Then place the fitting 3 in position (but before doing so tin the outside rim, so that hot

lead will adhere to it) and engage the bolts 10 thereto and place a level on the end of the said fitting, and when it becomes level pour melted lead into the space between the earthen flange 2 and the outside ring of the fitting 3. This hot lead adheres to the tinned surface of the said fitting 3 and liquidates the substance on the side surface of the earthen flange 2, causing it to settle into the space made by the contractions of the lead in chilling. After this is done force the lead in with a flat edge tool, and a perfectly rigid and tight joint is the result. While this calked lead joint makes the strongest connection, it is not altogether essential that lead should be used, as some other soft metal or a hard-setting cement poured into the space between the brass and earthenware also makes a substantial joint.

In setting the fitting 7 put it in the end of the soil-pipe with the flange resting upon the flange of the lead pipe and place a level across the top of it, and when it becomes level solder it to the lead-pipe flange. This being done apply red or white lead or some other cement on the threads and screw the closet to the fitting 7 until it binds tightly therein and until the earthen flange almost touches the floor. After the closet is in place and connected form a ridge of clay or other suitable material around the entire flange of the closet, and then pour thin Portland cement or something of that nature in the inclosure and work it in the space between the closet-flange and the floor, and when the cement sets any part that remains around the outer edge can be cleaned away. This makes a solid foundation for that portion of the closet that extends in either direction beyond the side of the discharge-limb. If a malleable-iron fitting 3 is used, it can be calked or cemented in about the same manner that a brass fitting can; so I do not wish to be confined to any particular kind or shaped fitting 3, nor the fitting 7 that receives it.

The advantages I claim are—

First. By securing a metal fitting to the discharge end of an earthen closet under the foot in the manner described and screwing it to a metal fitting connected to the soil-pipe rigid and tight a perfect joint beyond a doubt is obtained.

Second. By screwing the lever 16 directly to the earthenware and guiding it in the manner shown it simplifies the operating of a tank-valve.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination with an earthenware water-closet, of a threaded metal fitting secured to the discharge end thereof, and a metal coupling threaded to correspond with and screw on the threaded metal fitting that is secured to the end of the earthen closet, and adapted to be connected rigidly to the end of a metal soil-pipe, the whole being arranged so that it is necessary to revolve the

entire closet to screw it to the coupling after the said coupling is rigidly secured to the soil-pipe, and so that the threaded ends are hidden from view when the closet is screwed up in position.

2. The combination with an earthenware water-closet having a recessed earthen flange or foot 2, of a metal fitting 3 having an edge 6 corresponding in shape to the recessed earthen flange, and a threaded end 4 extending below the said outer edge, a cement or lead joint 12 between the metal fitting and the earthen flange, and a threaded fitting 7 set in the soil-pipe 8 and secured thereto and adapted to receive the threaded end 4 of fitting 3 and form a tight joint, the whole being arranged so that when the closet is screwed in place the threaded fittings are hidden from view.

3. The combination with an earthenware water-closet having a recessed flange or foot on the discharge end, of a metal fitting leaded or cemented to the said discharge end under the flange or foot and having a threaded end integral with it, and a metal fitting or coupling threaded to screw on the fitting that is secured to the closet and adapted to extend down into the end of the soil-pipe and be soldered to that portion of it that projects through the floor.

4. The combination with an earthenware water-closet, of a recessed earthen flange corrugated on the inner side surface, a metal fitting secured therein with a soft-metal filling calked in the space between the metal and earthenware and having a threaded end integral with it, and a threaded fitting secured to the soil-pipe and adapted to receive the metal fitting that is secured to the closet, as and for the purpose set forth.

5. The combination with an earthenware water-closet having a recessed earthen flange or foot, of a recessed metal fitting 3, having a threaded end 4 adapted to screw into a threaded fitting on an end of the soil-pipe, bolt 10 extending through a hole in the earthen flange and engaged to the fitting 3, and a soft-metal filling 12 calked in the space between the side 6 of the fitting 3 and the side of the earthen flange, as and for the purpose set forth.

6. The combination with an earthenware water-closet having a recessed earthen flange or foot, of a recessed metal fitting 3 having a threaded end 4 adapted to screw into a threaded fitting on an end of the soil-pipe, a layer of cement between the flange of the fitting 3 and the inner side of the earthen flange 2, and a soft-metal filling 12 between the side 6 of the fitting 3 and the side of the earthen flange, as and for the purpose set forth.

7. The combination with an earthenware water-closet having an earthen flange or foot 2 and an enlargement or recess in the discharge end 1 beyond the flange 2, of a threaded metal fitting cemented or leaded in the said

enlargement or recess in such a manner that it is necessary to revolve the entire closet to secure it to the soil-pipe, and a threaded metal coupling screwed to the fitting in the end of the closet and adapted to be secured to the soil-pipe.

5 8. The combination with an earthenware water-closet, of a metal fitting 3 having a threaded depending end 4 secured to the discharge end of the closet, a threaded metal fitting or coupling secured to the soil-pipe to receive the threaded end 4 of the fitting 3, and a space beneath the flange of the closet wherein the joint that connects the fitting 7

to the soil-pipe 8 is hidden when the closet is 15 screwed in place.

9. The combination with an earthenware water-closet, of an aperture 13 made in the earthenware, a rod 15 passing in the aperture and secured therein, a fitting or guide 17 secured to a rear portion of the closet, a lever 16 secured to the rod 15, and guided in the fitting 17, a seat 24 to depress the lever and a chain 18 to open a valve in a tank.

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Witnesses:

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