W. W. MARSH.

CLOSET TRAP.

APPLICATION FILED SEPT. 4, 1914.

**1,144,488.** Patented June 29, 1915.

Fig. 1.

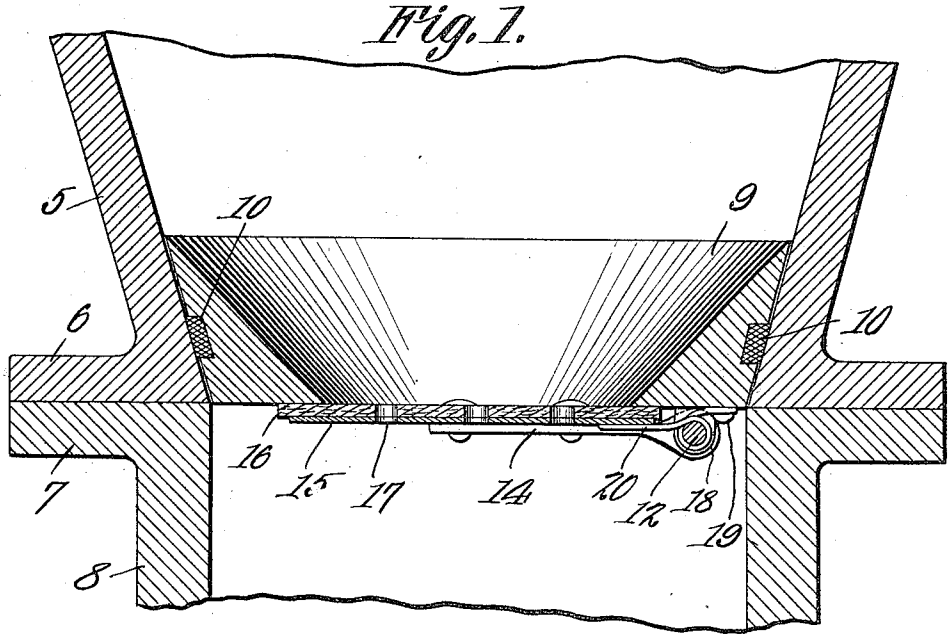
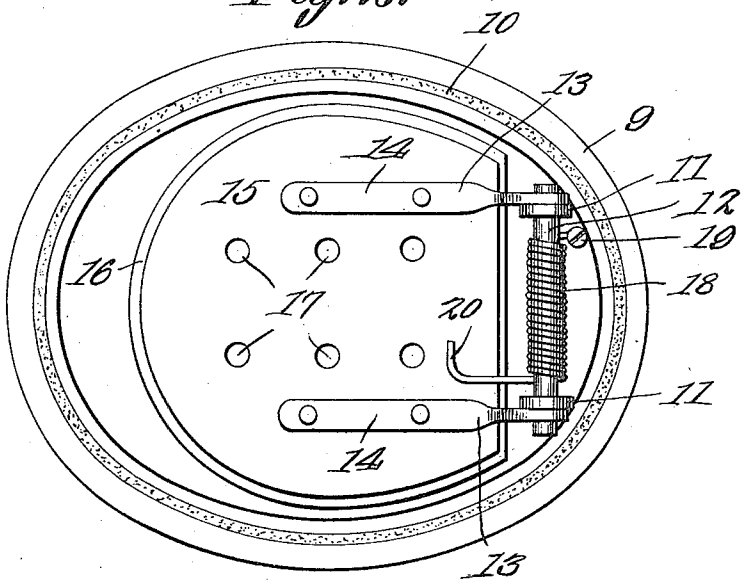



Fig. 2.




Witnesses
F. B. Woodew.
E. Walton Brewington.

Inventor
Walter W. Marsh,
By Henry F. Brewington.
Attorney

THE NORRIS PETERS CO., PHOTO LITHO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

WALTER W. MARSH, OF BALTIMORE, MARYLAND.

## CLOSET-TRAP.

1,144,488. Specification of Letters Patent. Patented June 29, 1915.

Application filed September 4, 1914. Serial No. 860,129.

*To all whom it may concern:*

Be it known that I, WALTER W. MARSH, a citizen of the United States, residing at Baltimore city, State of Maryland, have invented certain new and useful Improvements in Closet-Traps, of which the following is a specification.

This invention is in the nature of a trap for closets especially adapted for use with out-door closets connected directly with the soil pipe.

The object of the invention is to provide improved means for catching and retaining large pieces of refuse or any similar articles which might be dropped into the hopper of an outside closet, whereby they may be readily removed from the closet without danger of stopping up the soil pipe.

With this object in view the invention consists in the improved construction, arrangement and combination of the parts of such a device, which will be hereinafter fully described and afterward specifically claimed.

In order that the construction and operation thereof may be readily comprehended, I have illustrated an approved embodiment of my invention in the accompanying drawings and will now proceed to specifically describe the same, having reference to said drawings, in which—

Figure 1 represents in vertical section the lower part of the hopper and the upper part of the soil pipe of an outdoor closet, with my improved catch trap inserted therein, also in section, the trap being shown closed. Fig. 2 represents in bottom plan view the trap removed from the closet.

Like reference characters mark the same parts in both of the figures of the drawings.

Referring specifically to the drawings 5 indicates the lower end of an ordinary conical hopper of a closet provided with a horizontal flange 6 at its lower end resting upon a like horizontal flange 7 at the upper end of the soil pipe 8.

My improved catch trap comprises a bowl 9, of ring shape, conically shaped on its outer edge to snugly fit the lower end of a hopper at its junction with the soil pipe, a suitable packing 10 being provided in a groove in the outer face of the bowl 9, to rest against the wall of the hopper and insure a close joint at this point. This ring-shaped bowl is also conical on its interior to provide a relatively wide base and an acute junction where its upper edge contacts with the closet hopper. On the under face of the ring-like bowl 9 are secured depending brackets 11 in which is journaled a shaft 12 upon which are secured arms 13 which have their outer ends 14 secured to the under face of a metal plate or trap-door 15 upon the upper face of which is secured a plate 16 of packing material, both plates being perforated as at 17 to permit of the passage of liquid through them. A spring 18 is coiled about the shaft 12 and has one end secured, by any suitable means, such as a screw 19, to the bottom of the ring-like bowl 9, the opposite end of the spring, as at 20 bearing upon the under face of the trap-door 15 and serving to hold the same normally closed. This spring is of sufficient strength to hold the door closed when ordinary refuse, or stray articles are lodged thereon, but at the same time is sufficiently yielding to permit the door to open downward when the closet is flushed. The trap door will therefore serve to temporarily retain large particles of refuse, or any stray articles which may be dropped into the closet bowl, without preventing the draining off of the liquid when the trap is closed and also without preventing the ordinary flushing of the closet. Owing to the conical interior of the hopper, and the similar conical exterior of the ring-like bowl 9, it will be firmly supported at the lower end of the hopper, without any fastenings whatever, and at the same time will not be allowed to drop into the soil pipe. It is readily removable and re-insertible, and a close joint is maintained at all times by the packing ring 10.

While I have specifically described the construction and operation of the various parts of the invention, I desire it to be understood that slight changes and variations may be made therein, without departing from the spirit and scope of the invention as hereinafter claimed.

Having thus fully described my invention what I claim as new and desire to secure by Letters Patent of the United States is—

A closet trap adapted for use in connection with a closet hopper having a conical interior wall, comprising a ring-like bowl provided with an unobstructed conical exterior wall extending its entire height and of the same degree of pitch as the interior wall of the hopper, whereby it will snugly fit

within and be supported by said hopper, and also being provided with an interior wall of greater pitch than the exterior wall and which extends from the top edge of said exterior wall downwardly and inwardly to provide a sharp edge at the top of said bowl and a relatively wide flat portion on its lower side, and a yieldingly supported trap door for closing the underside of said bowl secured to said flat portion.

In testimony whereof I affix my signature in presence of two witnesses.

WALTER W. MARSH.

Witnesses:

E. WALTON BREWINGTON,

HOWARD D. ADAMS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."