

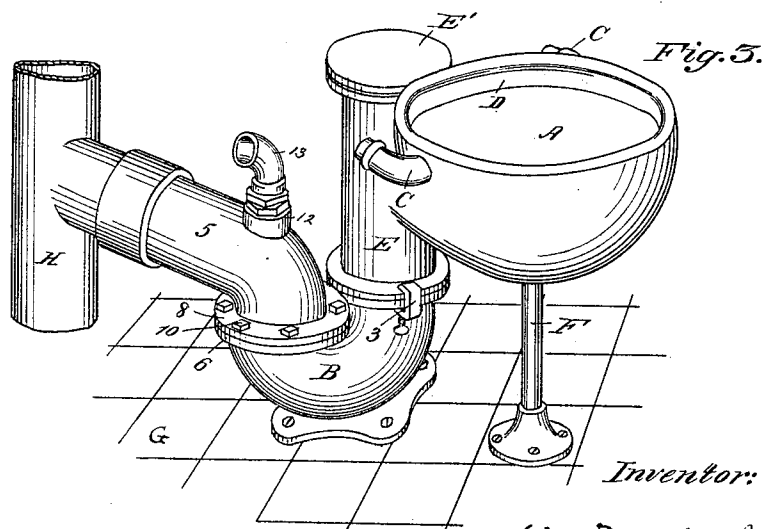
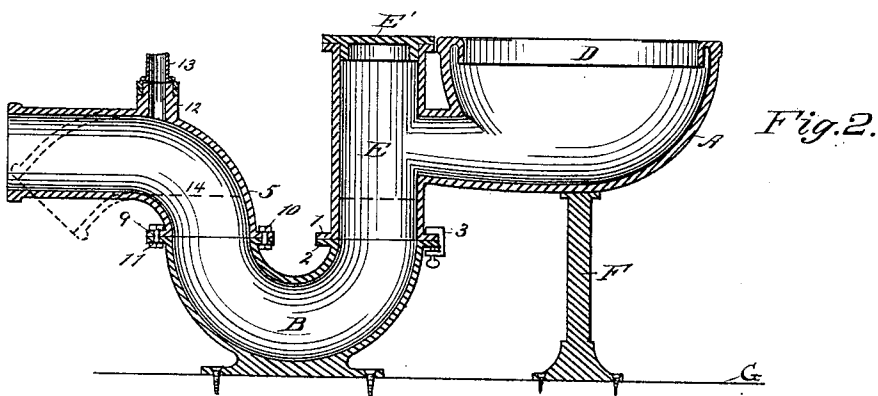
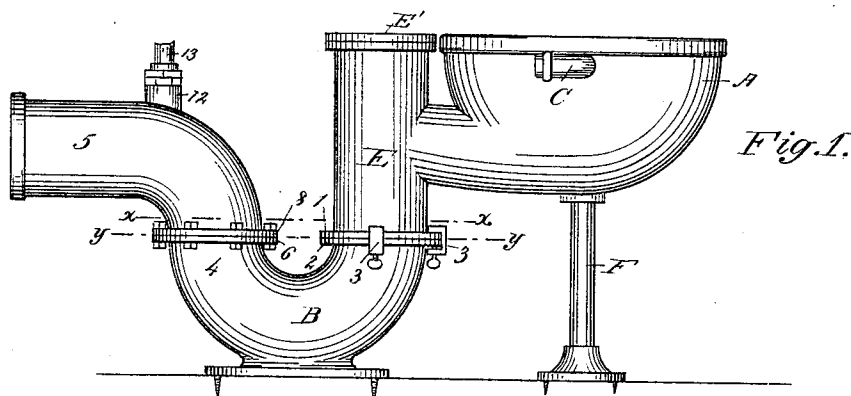
(No Model.)

2 Sheets—Sheet 1.

W. BUNTING, Jr.
WATER CLOSET APPARATUS.

No. 360,337.

Patented Mar. 29, 1887.



Attest:

Andrew W. Steiger.

George B. Hilton.

Inventor:

Wm Bunting Jr

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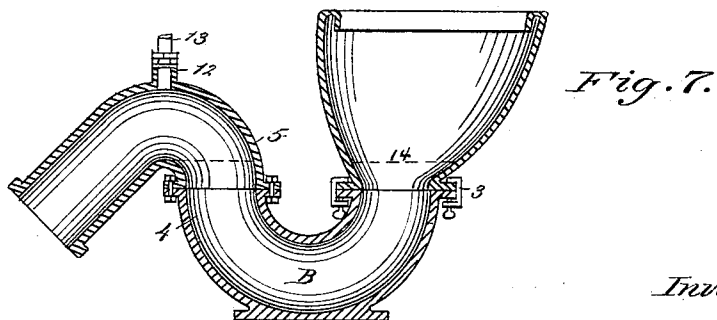
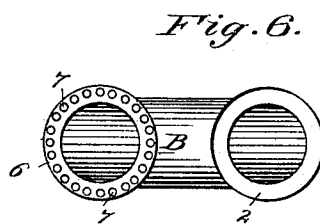
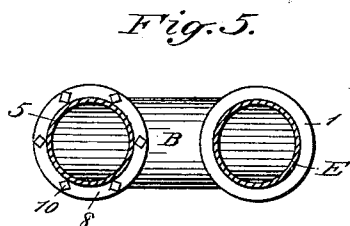
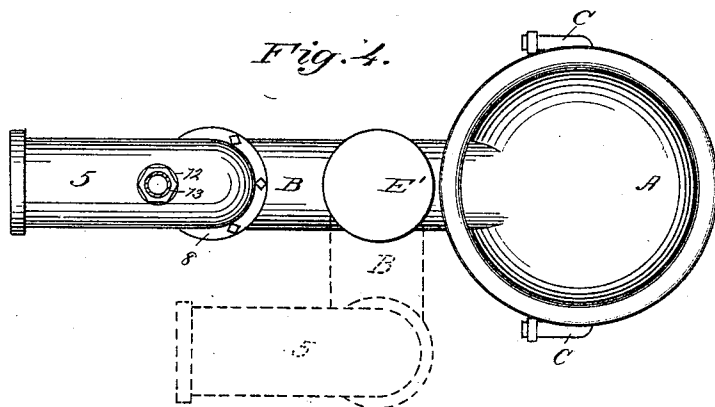
(No Model.)

2 Sheets—Sheet 2.

W. BUNTING, Jr.
WATER CLOSET APPARATUS.

No. 360,337.

Patented Mar. 29, 1887.



Attest:

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UNITED STATES PATENT OFFICE.

WILLIAM BUNTING, JR., OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE MEYER-SNIFFEN COMPANY, (LIMITED,) OF NEW YORK, N. Y.

WATER-CLOSET APPARATUS.

SPECIFICATION forming part of Letters Patent No. 360,337, dated March 29, 1887.

Application filed February 1, 1887. Serial No. 226,154. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM BUNTING, JR., a citizen of the United States, and a resident of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Water-Closet Apparatus, of which the following is a specification.

Previous to my invention certain constructions of water-closets have been connected to traps (above the floor of the room) in such a manner that the latter could be set or arranged either at the front, back, or side of the bowl of the closet, according to the location of the soil-pipe and the way in which it should be desired to connect the trap therewith. In many instances traps so connected to the water-closets are very useful and answer all the requirements; but in some cases—as, for instance, where the closet must be put at a given locality—it is often found that the soil-pipe, previously placed, occupies such a position relatively to the out-go of the trap that a connection with the same can be made only by the employment of an extra piece of pipe between the soil-pipe or its branch and the discharge end of the trap, and this mode of connection is expensive and otherwise objectionable.

My invention has for its object to improve the construction of this class of water-closet apparatus, and adapt the trap for connection with the soil-pipe or a branch thereof above the floor, which is very desirable, without the intervention of any separate or extra piece of pipe, and at the same time be able to place the closet-bowl as near to the soil-pipe as desired or necessary, or as far therefrom as the length of the parts will permit; and my invention consists in certain features of construction and combinations of parts, which will be hereinafter more fully described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of a contrivance embodying my invention. Fig. 2 is a vertical central section thereof. Fig. 3 is a perspective view of the same, and showing in addition a portion of the soil-pipe. Fig. 4 is a plan view of the contrivance shown at Fig. 1. Fig. 5 is a horizontal section taken at the line *xx* of Fig. 1.

Fig. 6 is a similar section taken at the line *yy* of said figure, and with the clamps removed. Fig. 7 shows my improvements applied to a water-closet bowl of different construction than illustrated in the other views.

In the several figures of drawings the same parts will be found designated by the same numerals and letters of reference.

A represents the water-closet bowl or basin, which may be of any desirable shape or construction. B represents the trap, which is secured to the outlet of the basin. The lower portion of the closet is provided with a flange, 1, and the upper end of the trap with a corresponding flange, 2, and these flanges are bolted or connected together by the clamps 3, suitable packing being interposed to secure a tight joint.

The outlet-leg of the trap is made in two parts, 4 and 5, adjustable with reference to each other. The part 4 is provided with a circular flange, 6, which is formed with a number of holes or perforations, 7. The part 5 is provided with a similar flange, 8, at its inner end, likewise perforated, as at 9, but preferably with a less number of holes than is contained in the flange 6. Bolts 10 and nuts 11 are provided for securing these parts together. The part 5 may be of the quarter or half S shape shown or of other construction. This part of the trap is preferably formed with a nozzle, 12, for attachment thereto of a ventilating-pipe, 13.

The construction of closet shown at Figs. 1, 2, 3, and 4 is what is known as a “side-delivery” closet, in which the flushing-water entering at the nozzles C C escapes from the flushing-rim D and drives the contents of the bowl into a trunk or vertical conduit, E, formed integral therewith, and thence through the trap into the soil-pipe. The trunk is provided with the usual removable cover, E'. When my invention is embodied in this type of closets I use a bracket or standard, F, to support the bowl. This bracket or standard F is provided with a sufficiently broad base at its lower end, which is preferably screwed to the floor G, and with a suitably shaped and sized seat at its upper end for the body of the bowl to rest upon.

The construction of closet shown at Fig. 7 is that commonly designated as a "hopper-closet," and, as customary, the trap is connected directly to the lower open end thereof, and serves as a support therefor. In both cases the trap is secured to the floor by screws or other devices.

It will be observed that in either modification the water-level of the trap extends above the joints formed by the coupling together of the flanges 1 and 2 and 6 and 8, as indicated by the dotted line 14. This is very desirable, inasmuch as an escape of foul gases into the apartment at the joint of the two-part leg of the trap is thereby prevented.

It will be observed that when the clamps 3 are loose or detached the trap is adjustable or rotatable about the closet, (or vice versa,) and that when the bolts and nuts 10 and 11 are removed the part 5 is adjustable about the part 4 and the body of the trap, (or vice versa.) By reason of these adjustments I am enabled to set the closet at the desired locality and arrange the jointed trap so that its outlet 5 may be connected directly to the soil-pipe or its branch without the use of any extra length of pipe, as indicated at Fig. 3, where the trap-body is turned sidewise or at right angles to the part 5, in order to shorten the length or contract the area of the whole contrivance.

In Figs. 1 and 2, and in Fig. 3 in full lines, these several parts of the whole structure are represented as arranged in a right line, and in this position the discharge end of outlet-pipe 5 is located from the bowl as far as it is possible to get it; but this pipe 5 may be turned on its vertical axis, either to the right or the left, to reach the soil-pipe, and the body of the trap may be likewise so adjusted, as illustrated by the dotted lines in Fig. 4.

By having a large number of holes, 7, in the flange 6, I am enabled to secure a great variation in adjustment, and by having only a few holes in the flange 9 it is necessary to use only a few bolts and nuts. The sets of holes should be relatively arranged, so that, no matter what the angle of adjustment, all the holes in the flange 9 will coincide or register with holes in the flange 6, in order that the bolts may be in-

troduced and the parts tightly secured together. In the drawings I have shown twenty-four equidistant holes in the flange 6 and six equidistant holes in the flange 9, and the latter being a multiple of the former, it will be seen that when one hole in the flange 9 coincides with one hole in the flange 6 all the holes in the flange 9 will be in alignment with holes in the flange 7. The joints formed at the flanges I purpose packing in any of the known ways, to avoid a leakage of water from the trap.

So far as the main feature of my invention is concerned the flanges may be joined by other means than those shown. It will of course be understood that when the adjustable parts shall have been arranged in the desired or requisite position, the flanges referred to are all coupled together and the outlet-pipe 5 connected with the soil-pipe H.

Having now so fully described my invention that those skilled in the art may make and use contrivances embodying the same, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with a water-closet and secured thereto, a trap having its outlet-leg composed of two parts, as 4 and 5, and having the inner end of the part 5 joined to the upper end of the part 4 below the water-level, for the purpose set forth, and the outer or discharge end of the part 5 extending laterally, so that the part 5 may be rotated about the part 4 as a center and its outer or discharge end swung around in a circle or an arc of a circle to meet and be connected above the floor to a soil-pipe or a branch thereof, as set forth.

2. In combination with a water-closet provided with a flange, 1, a trap provided with a coincident flange, 2, and having a two-part outlet-leg, 4 5, provided with coincident flanges, and means for securing the said flanges together, substantially as set forth.

Signed at Boston, in the county of Suffolk and State of Massachusetts, this 29th day of January, A. D. 1887.

WILLIAM BUNTING, JR.

Witnesses:

FISHER AMES,
GEO. Z. HAMBLIN.