No. 771,254. PATENTED OCT. 4, 1904.

H. H. KENDRICK.

WATER CLOSET.

APPLICATION FILED DEC. 7, 1903.

NO MODEL.

Fig. 1

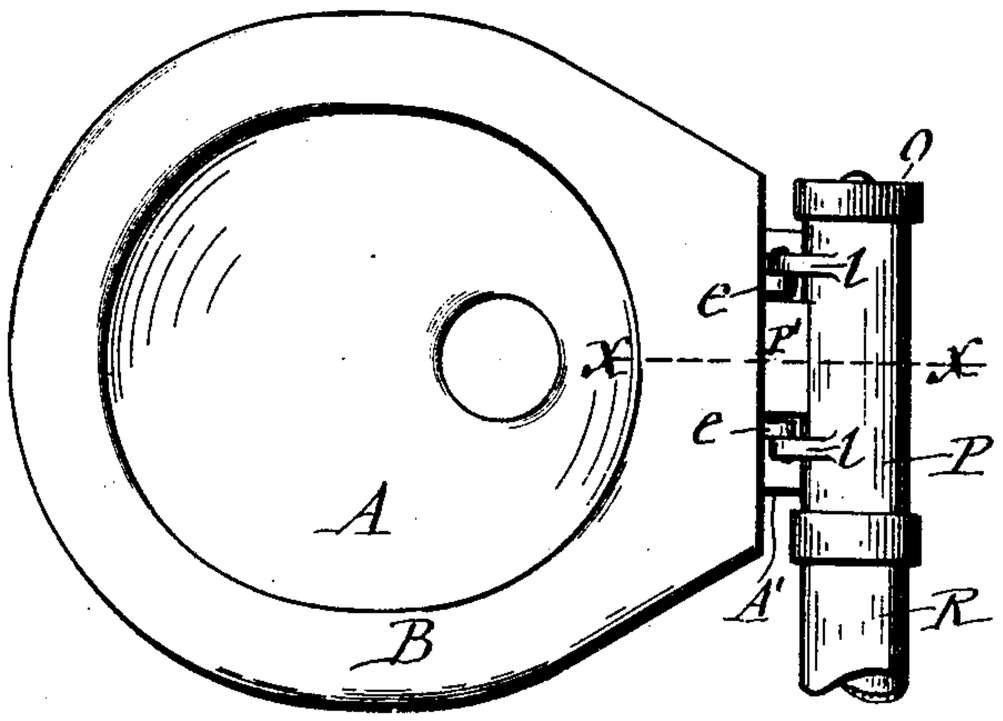


Fig. 2

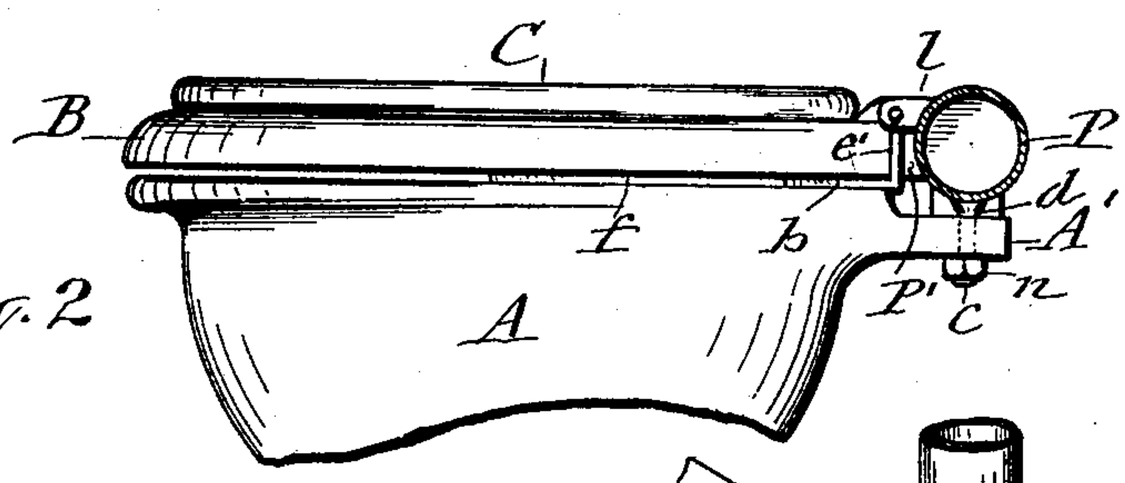


Fig. 3

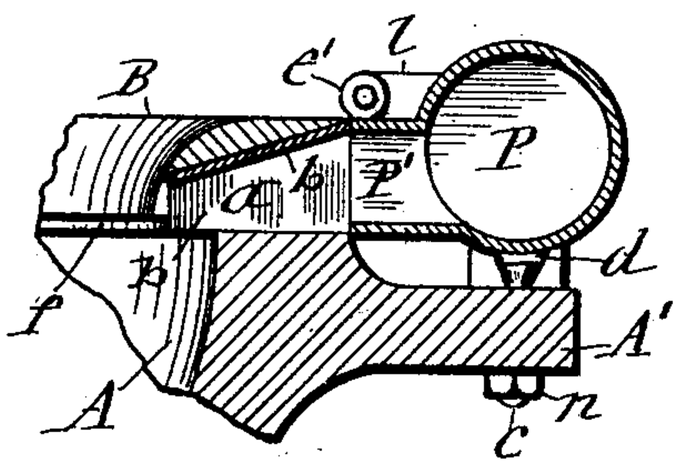


Fig. 4

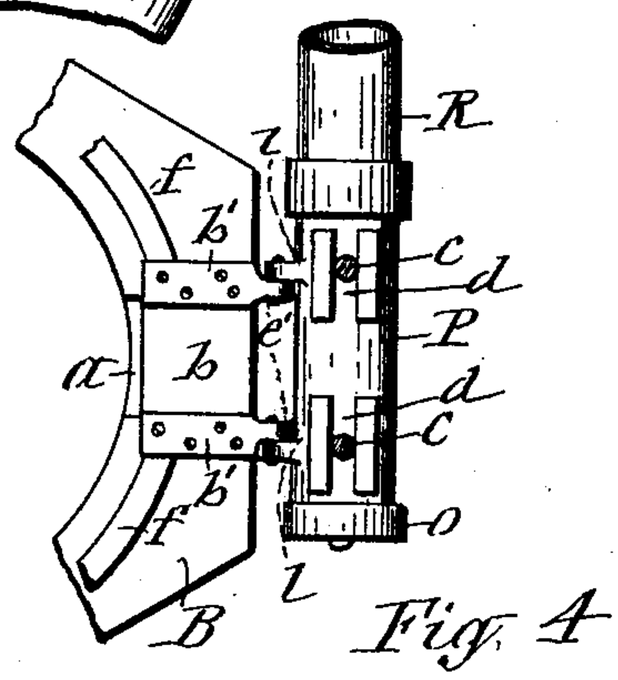


Fig. 5

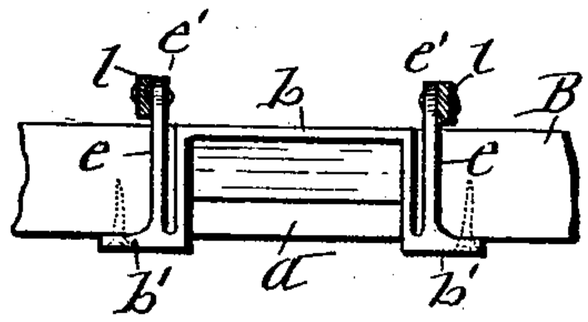


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PHOTO-LITHOGRAPHED BY SACKETT & WILHELMS LITHO. & PTG. CO. NEW YORK.

No. 771,254. Patented October 4, 1904.

# UNITED STATES PATENT OFFICE.

HILAND H. KENDRICK, OF FULTON, NEW YORK.

## WATER-CLOSET.

SPECIFICATION forming part of Letters Patent No. 771,254, dated October 4, 1904.

Application filed December 7, 1903. Serial No. 184,051. (No model.)

*To all whom it may concern:*

Be it known that I, HILAND H. KENDRICK, a citizen of the United States, and a resident of Fulton, in the county of Oswego, in the State of New York, have invented new and useful Improvements in Water-Closets, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to the class of water-closets which are provided with ventiducts communicating directly with the closet-bowl to carry off the foul air from the bowl; and the invention consists in certain novel improvements in the detail construction and combination of the component parts of the ventilating devices, as hereinafter described and claimed, and as illustrated in the annexed drawings, in which—

Figure 1 is a plan view of a water-closet embodying my invention. Fig. 2 is a fragmentary side view of the same provided with a cover. Fig. 3 is an enlarged transverse section on the line X X in Fig. 1. Fig. 4 is an inverted plan view of the ventilating portion of the closet, and Fig. 5 is a rear end view of the reinforcing-plate which compensates for the weakening of the seat-rail incident to the cutting of the ventiduct through it.

A represents the closet-bowl, which may be of any ordinary and well-known form.

B denotes the seat, and C the cover.

*a* represents the ventiduct, which is cut in the under side of the seat-rail, and thus weakens said rail to such an extent as to render it liable to split or warp thereat.

One of the chief objects of my invention is to obviate such injury or destruction of the closet-seat and at the same time apply to the wooden surfaces of the ventiduct a lining to shield it from moisture in the air and gases passing through said ventiduct, and to that end I employ a metal plate *b*, attached at its ends to the under side of the seat at opposite sides of the ventiduct *a*, as shown at *b' b'*, and formed intermediate its ends with an upward deflection of a shape and size to lie directly on the sides and top of the ventiduct *a*, so as to form a lining therein. The plate *b* at the same time forms a tie, which braces the seat-rail across the ventiduct *a*. This reinforcement permits the ventiduct to be cut farther across the seat-rail, and thus facilitate the ventilation of the bowl.

P represents the ventilating-pipe, which is designed to receive the air from the ventiduct *a*. This pipe is bolted to a suitable projection A', formed on the exterior of the rear portion of the bowl. To allow the attaching-bolts *c c* to be adjusted in their positions to conform to the location of the bolt-holes in the projection A', I provide the pipe P with longitudinal grooves *d d*, which are dovetailed or undercut to receive correspondingly-shaped heads of the attaching-bolts *c c* and allow the bolts to be shifted lengthwise of the pipe and to positions coinciding with the bolt-holes in the projection A'. This adjustability of the attaching-bolts adapts my ventilating devices to be applied to various closet-bowls already in use. The lower ends of the attaching-bolts are provided with nuts *n*, by means of which the pipe P is firmly secured in its required position. The pipe P is provided with a lateral branch duct P', which is shaped to abut against the outer end of the ventiduct *a* and communicates with the same when the seat B is placed down onto the rim of the bowl. The seat B is hinged to the pipe P by means of posts *e e*, which are formed integral with the reinforcing-plate *b* and terminate in perforated ears *e'*, which are contiguous to the sides of perforated lugs *l l*, formed on the pipe P. Through each of the ears *e'* and adjacent lug *l* passes one of the hinge-pins which couple the seat B to the pipe. By forming the posts *e e* on the reinforcing-plate I dispense with separate attaching-screws for the said parts. To promote the ventilation of the bowl, I attach to the under side of the seat-rail packing-strips *f f*, of rubber or other suitable material, as shown in Fig. 4 of the drawings. Said strips extend from the plate *b* part way toward the front of the seat, so as to guide the air from the bowl to the ventiduct *a*.

One of the important advantages derived from my invention consists in the positive alinement of the branch duct P' with the ventiduct *a*, which alinement is due to the forming of the coupling-post *e e* integral with the plate

*b* and the connections of said posts with the lugs *l l*, which are integral with the pipe P. The pipe P is closed at one end by a cap *o* and has connected to the opposite end a pipe extension R for conducting the air from the pipe P to the exterior of the building either direct or through a suitable flue leading out of the building. The said cap and pipe extension are both detachable from the pipe and are interchangeable in their position thereon to adjust them to the direction in which the air is to be conveyed from the pipe.

What I claim as my invention is—

1. In combination with the bowl and the closet-seat provided with a ventiduct extending transversely through the seat-rail, a reinforcing-plate extending across said ventiduct and attached to the seat, a ventilating-pipe supported on the bowl adjustably in relation to the aforesaid ventiduct, ears formed directly on said pipe, and posts formed on the reinforcing-plate and pivoted to the said ears as set forth.

2. In combination with the bowl and the seat provided with a ventiduct extending transversely through the bottom portion of the seat-rail, a combined reinforce and lining consisting of a metal plate attached to the seat-rail at opposite sides of the ventiduct and formed intermediate its ends with an upward deflection lying directly on the sides and top of the ventiduct, the ventilating-pipe provided with ears, and posts formed on the aforesaid reinforce and lining and pivoted to said ears as set forth.

3. In combination with the bowl and the seat provided with a ventiduct through the seat-rail, a plate attached to the seat-rail at opposite sides of the ventiduct and formed intermediate its ends with an upward deflection lying directly on the sides and top of the ventiduct, the ventilating-pipe supported on the bowl adjustably in relation to the ventiduct and formed with laterally-projecting ears, and posts formed on the aforesaid plate and pivoted to said ears as set forth and shown.

4. The combination with the bowl and the closet-seat formed with a ventiduct transversely through the seat-rail, of a ventilating-pipe communicating with the ventiduct and provided externally with longitudinal dovetailed grooves, and bolts provided with heads inserted in said grooves and adjustably fastening the pipe to the bowl as set forth.

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