

March 31, 1936.

F. PIPER

2,035,567

IMPROVED CLOSET APRON

Filed Dec. 16, 1935

2 Sheets-Sheet 1

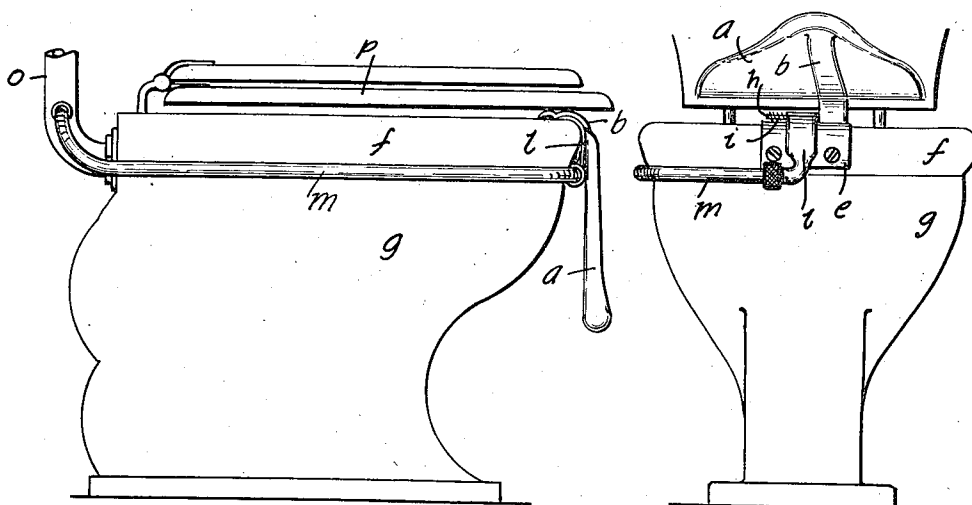


Fig 1

Fig 2

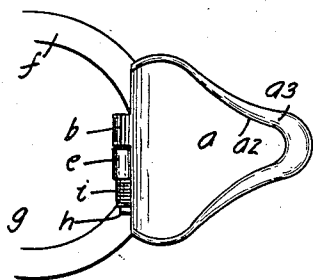


Fig 3

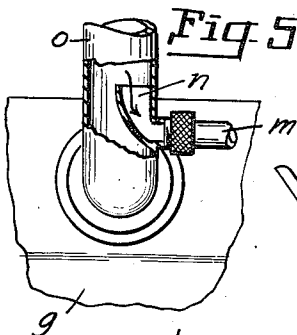


Fig 5

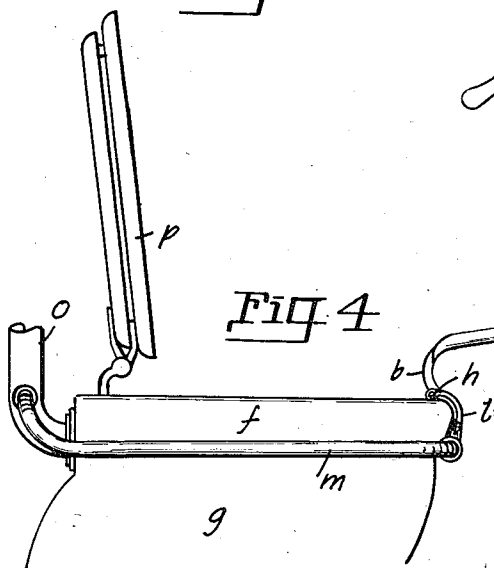


Fig 4

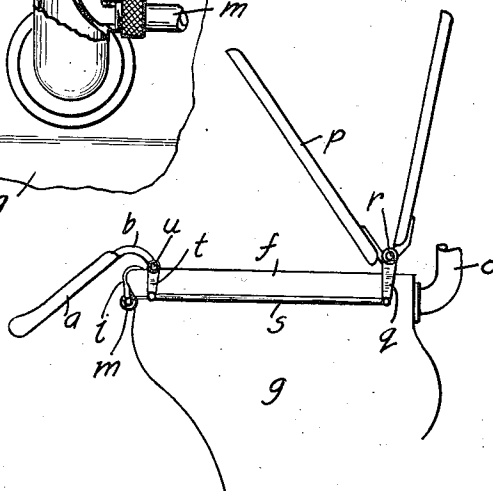


Fig 6

Inventor

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2 Sheets-Sheet 2

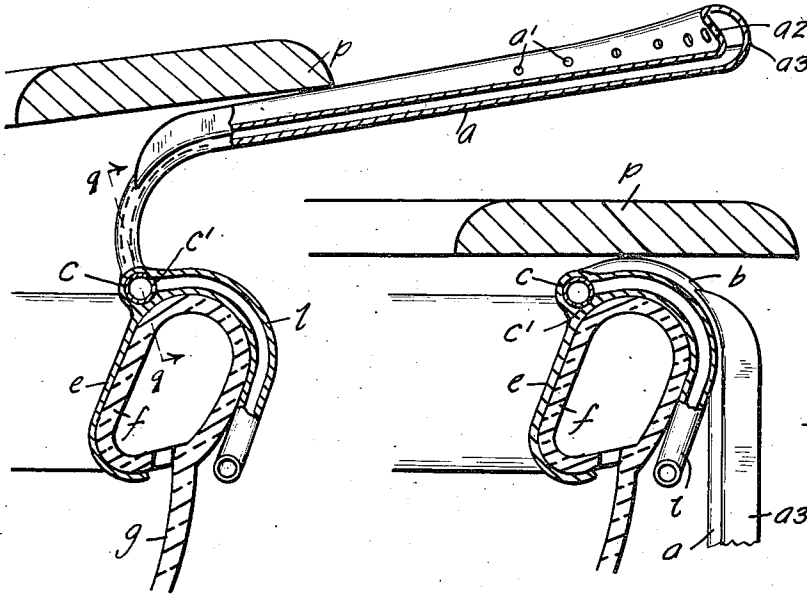


Fig 8

Fig 7

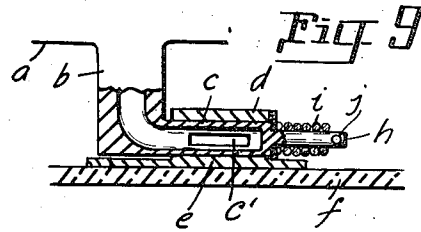


Fig 9

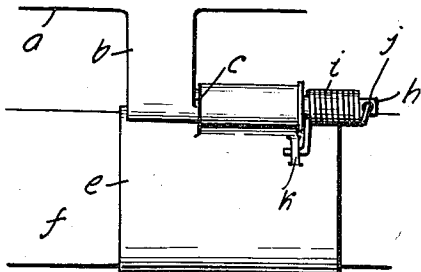


Fig 10

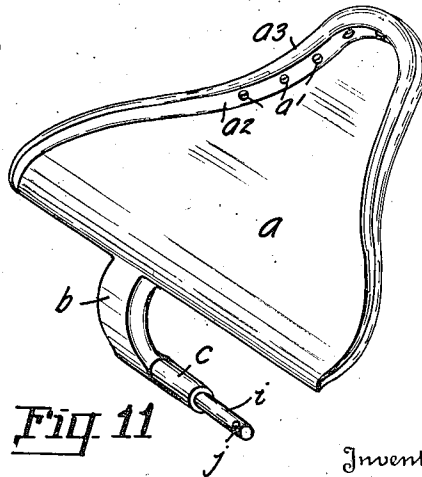


Fig 11

Inventor

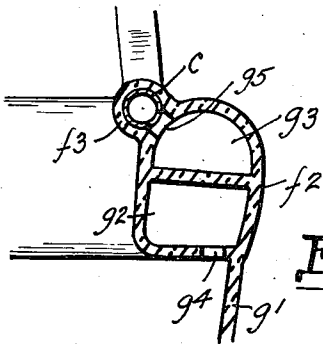


Fig 12

Fredrick Piper

UNITED STATES PATENT OFFICE

2,035,567

IMPROVED CLOSET APRON

Frederick Piper, Portland, Oreg.

Application December 16, 1935, Serial No. 54,597

6 Claims. (Cl. 4—119)

My invention relates to a protective apron as attached to a closet bowl and is an improvement to my Patent No. 1,857,328, issued May 10, 1932.

The object of my invention is to flush the apron together with the flushing of said bowl.

Another object is to provide means for raising said apron together with the raising of the closet bowl.

These and other objects are illustrated in the accompanying drawings in which:

Fig. 1 is a side elevation of a standard water closet embodying my invention and illustrating a conduit from the flush pipe to said apron for flushing the same when in its raised position;

Fig. 2 is a front elevation showing the apron as hinged to a bracket secured to the rim of the closet bowl and in its raised position and also the hollow arm of said bracket as connected to the end of the conduit;

Fig. 3 is a plan view of the apron in its raised position and illustrates the spring which holds said apron in this position;

Fig. 4 is a side elevation showing the apron in raised position;

Fig. 5 is a fragmentary back view of the closet bowl with the flush pipe partially in section to illustrate the funnel shaped end of the conduit to apportion part of the water from the tank to the apron for flushing the same;

Fig. 6 illustrates a means for raising and lowering the apron together with the raising and lowering of the seat;

Fig. 7 is a fragmentary section of the front portion of the closet bowl with a bracket mounted on the rim thereof and a hollow apron hinged in said bracket and also a hollow arm of the bracket to which the conduit is connected;

Fig. 8 is a similar view but illustrating said apron in its lowered position;

Fig. 9 is a section taken on line 9—9 of Fig. 7 to illustrate the hollow pivot pin which functions as a valve to prevent the flushing of apron when in its lowered position;

Fig. 10 is a view illustrating the arm of the apron as pivotally mounted to the bracket and the spring for holding said apron in normal raised position;

Fig. 11 is a perspective view of the apron showing arm and pivot pin attached thereto and also the flushing holes in the inner wall of the rim of the apron; and

Fig. 12 is a fragmentary section of the rim of the bowl as divided into two compartments assumed to be connected in a convenient manner at the rear to the flush pipe. The lower com-

partment has the regular opening to flush the bowl while the upper compartment is provided with a boss in which the arm of the apron hinges and thru which flows the water for flushing said apron.

My improved apron as *a* is of a hollow construction and is provided with a hollow arm *b* from which projects at right angles a hollow pivot shaft *c* journaled in the bearing *d* of the bracket *e* which in turn is mounted to the rim *f* of the closet bowl *g*. A pin *h* extending from the shaft *c* has mounted thereon a spring *i* having one end thereof secured in a hole *j* in said pin and the other end secured in a lug *k* on said bracket. The tension of said spring holds the apron normally in its raised position.

A hollow arm *l* of the bracket *e* aids in supporting the same upon the rim *f* and to the end of said arm is connected one end of the conduit *m*. The other end of the conduit *m* (see Fig. 5) being flared as at *n* sets within the flush pipe *o*. Part of the water from flush tank will enter said conduit and flush said apron thru holes *a—1* in the inner wall *a—2* of the rim *a—3*.

The shaft *c* is in the nature of a rotating valve and is provided with an opening as *c—1* which is closed when the apron is hanging downward as in Fig. 8. The weight of the seat *p* holds said apron in its lowered position, thus said apron may only be flushed when the seat is raised and the apron is in its raised position.

In Fig. 6 an arm *q* mounted upon one end of the hinge pin *r* of the seat *p* is connected by a rod *s* to an arm *t* on a hinge pin *u* of the apron *a*. Thus as the seat *p* is raised the apron is also raised and attains its active position.

In Fig. 12 the rim *f—2* of the bowl *g—1* is composed of the compartments *g—2* and *g—3* which are connected in a convenient manner to the flush pipe, not shown but readily understood. The lower compartment *g—2* is provided with the usual opening as *g—4* to flush the bowl. The upper compartment *g—2* is provided with an opening *g—5* leading to a boss *f—3* in which the hollow shaft *c* of the apron is pivoted, and thus the water from the flush pipe entering this compartment will flush the apron when so desired.

Having thus described my invention what I claim as new and useful and wish to claim by Letters Patent, is:

1. A sanitary shield comprising an apron as pivotally mounted to the rim of a closet bowl, means for holding said apron normally in an inclined position above the rim of said bowl and means for flushing said apron.

2. A sanitary apron of the character described of hollow construction pivoted to the rim of a closet bowl, a valve like pivot pin therefor and a conduit leading from the flush pipe connected to said valve.
- 5 3. An apron of the character described of hollow construction pivoted to clamping member positioned on the rim of a closet bowl, a valve like pivot pin, an auxiliary hollow arm of said bracket connecting at one end with said valve and the other end with a conduit leading from the flush pipe whereby said apron may be flushed as desired when in raised position.
- 10 4. An apron of the character described hingedly mounted to the rim of a closet bowl, a cover for said bowl, and a link connecting the pivots of said apron and the seat whereby said apron is raised together with the seat.
- 15 5. An apron of the character described comprising a hollow body and rim with flush holes on the inner wall of said rim, a hollow arm integral with said apron, a hollow valve shaft projecting therefrom mounted in a clamp secured to the rim of a closet bowl, an auxiliary arm of said clamp registering with said valve at one end and connected at the other end with a conduit leading from the flush pipe.
- 10 6. An apron of the character described of hollow construction pivotally mounted to the rim of a closet bowl, an auxiliary compartment formed in the rim of the closet bowl connected at the rear end to the flush pipe and at the front to the pivot pin of said apron for flushing said apron as desired when in raised position.
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