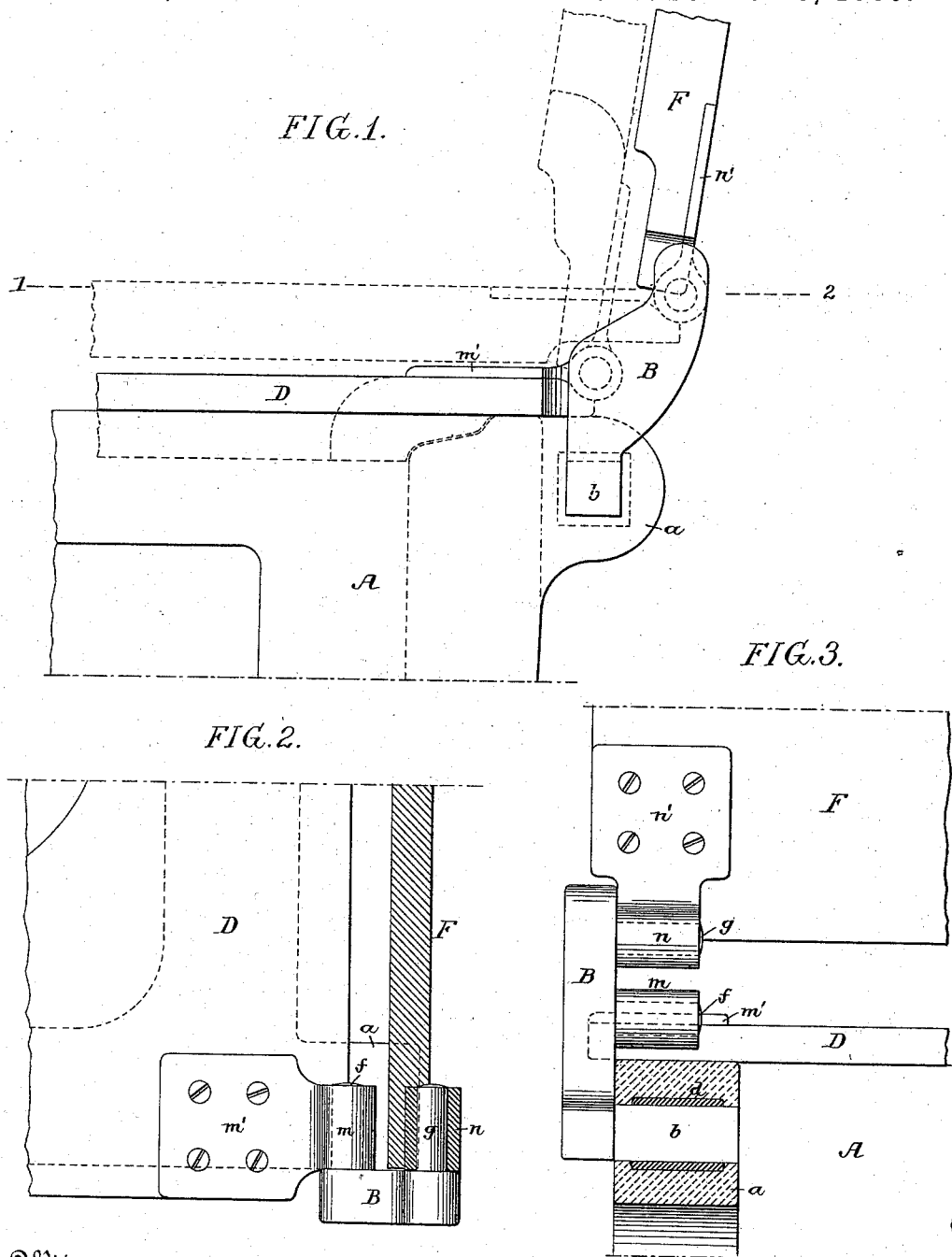


(No Model.)

W. S. COOPER.  
WATER CLOSET STRUCTURE.

No. 385,169.

Patented June 26, 1888.



Witnesses,  
John E. Parker.  
John T. Lewis.

Inventor,  
William S. Cooper,  
By his Attorneys *Houston & Sons*

# UNITED STATES PATENT OFFICE.

WILLIAM S. COOPER, OF PHILADELPHIA, PENNSYLVANIA.

## WATER-CLOSET STRUCTURE.

SPECIFICATION forming part of Letters Patent No. 385,169, dated June 26, 1888.

Application filed April 20, 1887. Serial No. 235,435. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM S. COOPER, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Water-Closet Structures, of which the following is a specification.

The object of my invention is to provide for hinging the seat, or the seat and lid, of a water-closet directly to the earthenware bowl of the same, and this object I attain in the manner hereinafter described, reference being had to the accompanying drawings, in which—

Figure 1 is a side view of part of a water-closet bowl and part of the lid and seat of the same, showing the method of hinging the same to the bowl. Fig. 2 is a sectional plan on the line 1 2, Fig. 1; and Fig. 3 is a rear view, partly in section.

In the drawings I have shown the hinge at one side of the bowl only, as the hinge at the opposite side of the same may be constructed in a precisely-similar manner.

A represents part of the bowl of the closet, having at the rear upper corner a projecting lug, *a*, in which is formed an opening for the reception of the shank *b* of a hinge-plate, B, the opening being recessed for the reception of suitable cement, *d*, whereby the shank of the plate is firmly retained therein.

On the plate B are, in the present instance, two inwardly-projecting pins, *f* and *g*, and to the pin *f* is adapted an eye, *m*, forming part of a plate, *m'*, secured to the seat D of the closet, the pin *g* being adapted to an eye, *n*, forming part of a plate, *n'*, secured to the lid F, said pin *g* being at such distance above the pin *f* as is required by the thickness of the lid F.

By the means described both the seat and the lid are hung directly to the bowl without the necessity of providing a special support for either of the said parts.

Where great strength is desired, the projection *a* may extend from side to side of the bowl, and the shanks *b* of the hinge-plates may be lengthened accordingly.

I claim as my invention—

1. The combination of an earthenware water-closet bowl, a lid or seat therefor, and a hinge having one part secured to said lid or seat and the other part secured directly to the bowl, all substantially as specified.

2. The combination of an earthenware water-closet bowl, with a seat and cover both hinged directly to the bowl, all substantially as specified.

3. The combination of the earthenware bowl of a water-closet, having a recess therein, a plate having a shank adapted to and secured within said recess, and a seat or lid hinged to said plate, all substantially as specified.

4. The combination of the earthenware bowl of a water-closet, having a recess therein, with a hinge-plate having a shank adapted to and secured within said recess, and with a seat and lid both hinged to said hinge-plate, the axis of the lid-hinge being in a higher plane than that of the seat-hinge, all substantially as specified.

5. The combination of the earthenware bowl of a water-closet, having a recess therein, a plate having a shank adapted to and secured within said recess, and two laterally-projecting hinge-pintles, one of which is in a higher plane than the other, a seat hung to the lower pintle, and a lid hung to the upper pintle, all substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WM. S. COOPER.

Witnesses:

WILLIAM D. CONNER,  
HARRY SMITH.