W. S. COOPER.

WATER CLOSET STRUCTURE.

No. 385,169.

Patented June 26, 1888.

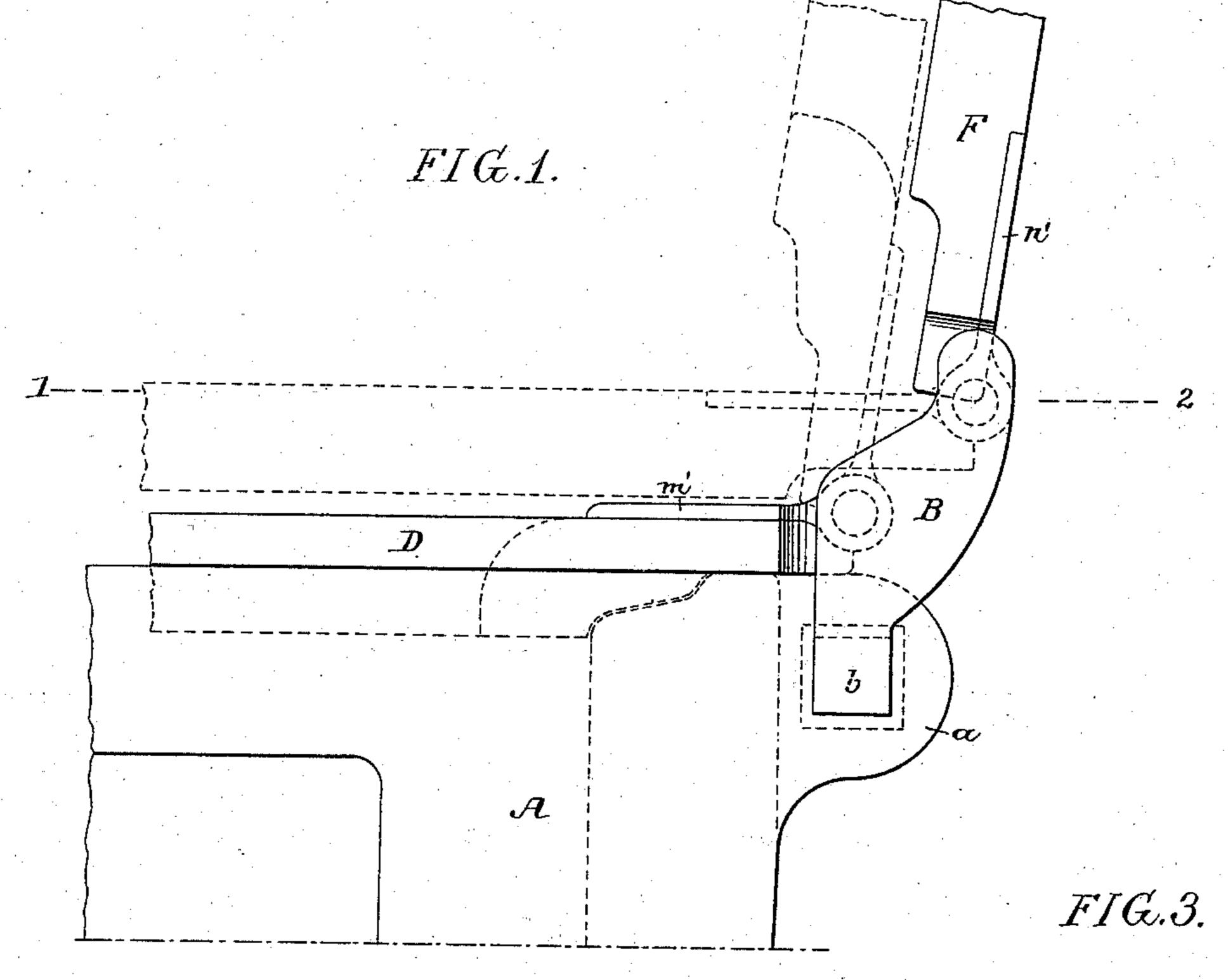
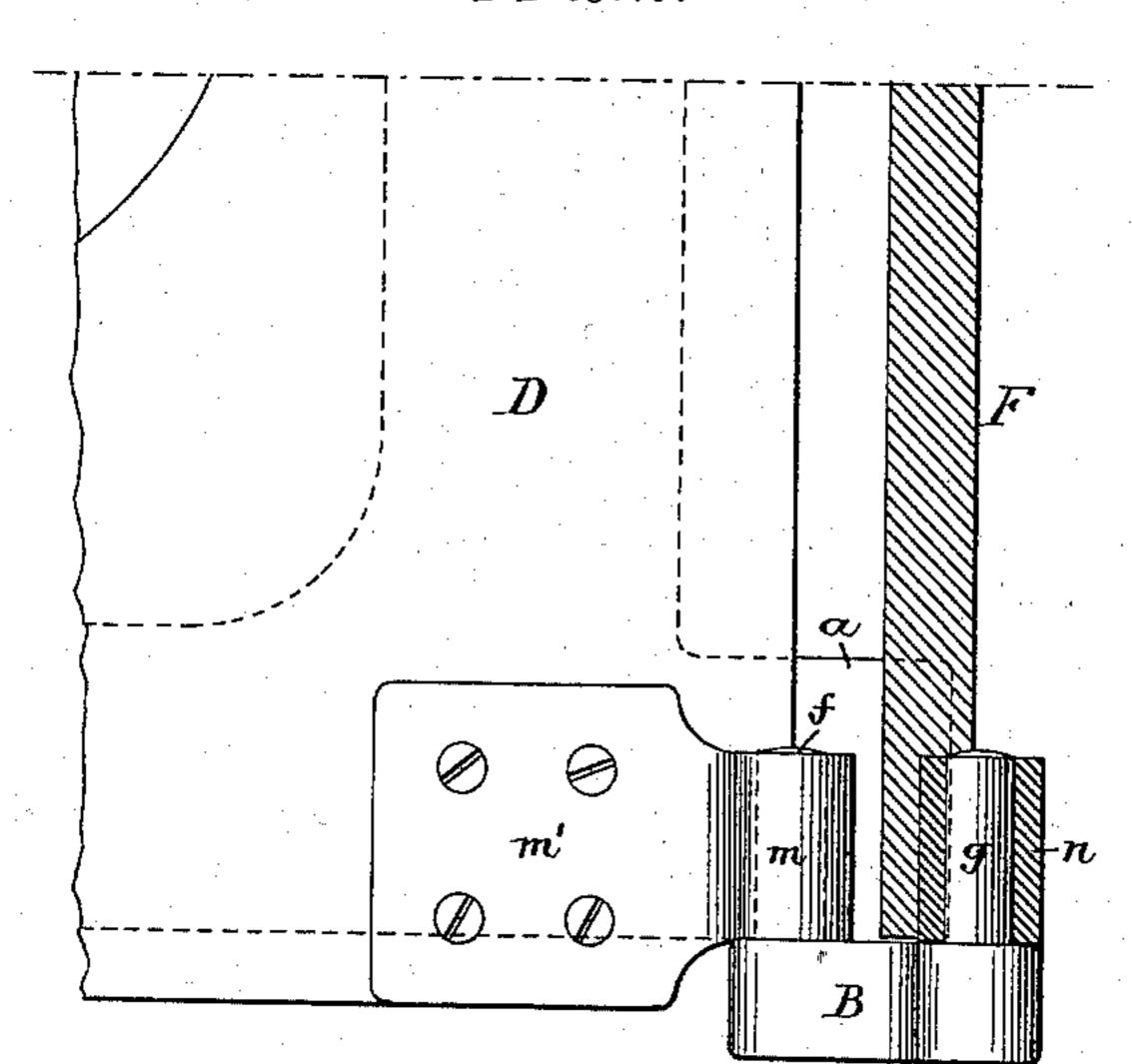
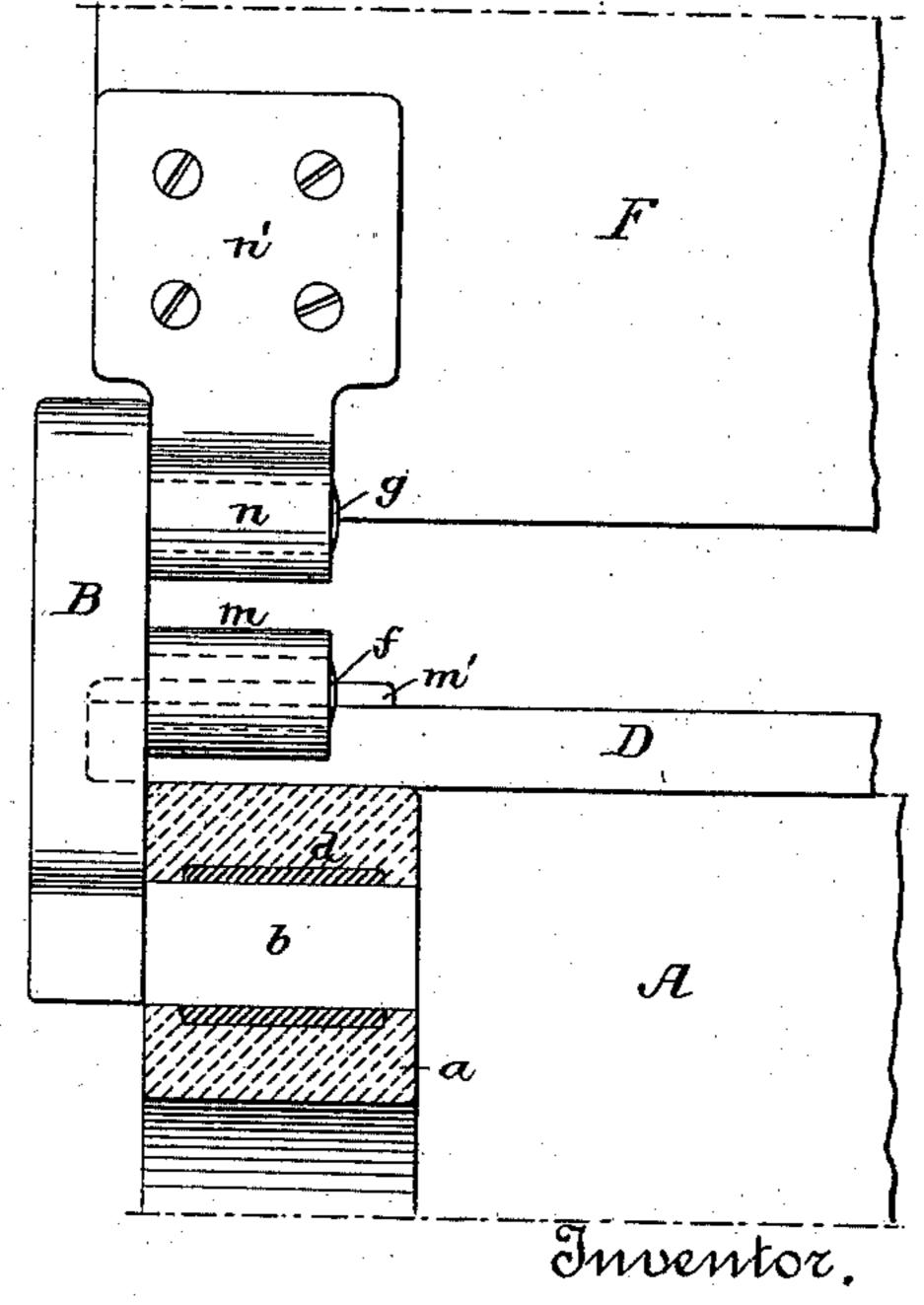


FIG. 2.



Witnesses, John E. Parker. John J. Lewis.



William S. Cooper,

By his attorneys Howson Valorys

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 5 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 12, 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 m' secured to the lide

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 15 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 50 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 55

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 60 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 55 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 70 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 75 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.