R. MITCHELL.

SERVICE BOXES FOR WATER-CLOSETS.

No. 189,947.

Patented April 24, 1877.

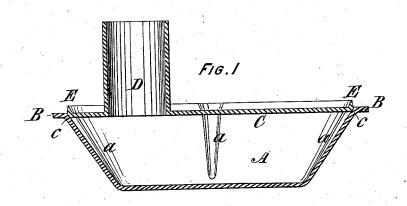
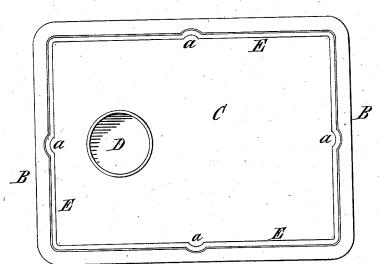


FIG.2



Witnesses:
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Robt hischell Inventor: Per Atty Rashifter wolks

UNITED STATES PATENT OFFICE.

ROBERT MITCHELL, OF MONTREAL, QUEBEC, CANADA.

IMPROVEMENT IN SERVICE-BOXES FOR WATER-CLOSETS.

Specification forming part of Letters Patent No. 189,947, dated April 24, 1877; application filed January 31, 1877.

To all whom it may concern:

Be it known that I, ROBERT MITCHELL, of the city of Montreal, in the District of Montreal and Province of Quebec, Canada, have invented certain new and useful Improvements in Service-Boxes; and I do hereby declare that the following is a full, clear, and exact description of the same.

This invention relates to that class of lead service-boxes which are cast in two parts, namely, the body and the cover thereof; and my improvement consists in casting the body with a rim, and the cover with a rib upon its edges, to provide for the fusing of the cover to the body after they have been properly fitted together.

The manner in which lead service boxes have, up to the present time, been manufactured is by forming the body of the box upon a block, and then attaching it by solder, &c., to the top plate, from which the pipe is car-

ried up to the valve.

The manner in which I propose to make my service-box is by casting in one piece the body with a rim or flange, which, when the article is complete, will form part of the top plate.

The top plate, with the pipe attached thereto, is also formed in one piece, and has its edge turned up all round, so that the extra metal contained therein may, when fused, secure this part to the rim, and make the top plate complete.

For fuller comprehension of my invention reference must be had to the annexed draw-

ings, where-

Figure 1 is a sectional elevation of the invention. Fig. 2 is a plan view of the invenSimilar letters of reference indicate like

A is the body of the box, which, as in this instance, may be, in shape, oblong and somewhat dished, or of any other usual and suitable form. In the sides of this box are, by preference, formed grooves a, for the purpose of stiffening the sides, these grooves tapering upward to their widest point at the rim B, which, as before mentioned, is cast in one with the box proper.

C is the plate or cover, having cast in one with it the pipe D. This plate corresponds exactly in size and shape with the open top of the box, and when set in place is exactly level with the rim B, the lower part of this plate being, as shown at c, Fig. 1, cut away to follow the slope of the sides of the box.

Round the edge of this plate or cover C is formed an upwardly-projecting flange, E, of metal, which, when the plate C is to be united to the rim B, is fused by a blow-pipe, or in any other suitable way, the molten metal making the joint between the two parts, and forming them into a complete top plate or cover.

I claim

The herein-described lead service-box, composed of body A formed with rim B, and cover C formed with rib E, the body and cover being fused together, all substantially as and for the purpose specified.

ROBERT MITCHELL.

Witnesses:

J. MURRAY, ROBT. ARTHUR KELLOND.