

E. A. LELAND.
WATER-CLOSET PAN.

No. 172,572.

Patented Jan. 25, 1876.

Fig: 1.

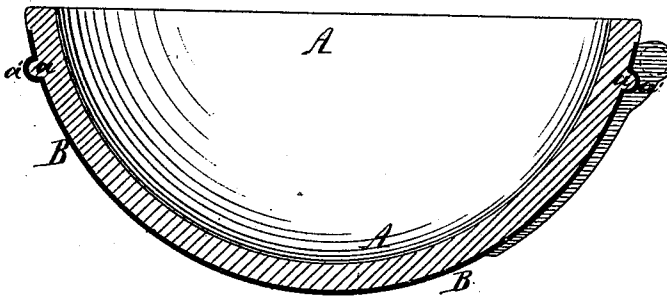
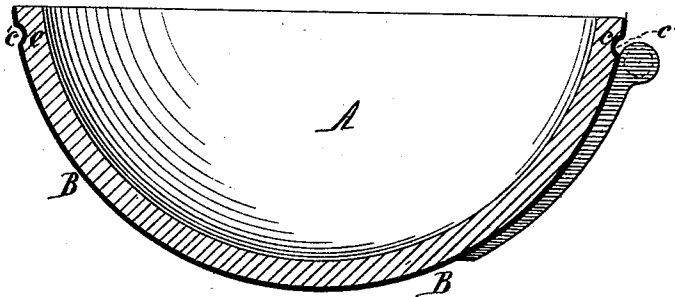


Fig: 2.



Witnesses:
H. Wells Jr
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UNITED STATES PATENT OFFICE.

EDWIN A. LELAND, OF NEW YORK, ASSIGNOR TO LEONARD RICHARDSON,
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IMPROVEMENT IN WATER-CLOSET PANS.

Specification forming part of Letters Patent No. 172,572, dated January 25, 1876; application filed
September 2, 1875.

To all whom it may concern:

Be it known that I, EDWIN A. LELAND, formerly of Pittsfield, in the county of Berkshire and State of Massachusetts, but now of the city, county, and State of New York, have invented an Improvement in Pans for Water-Closets, of which the following is a specification:

This invention relates to water-closet pans constructed with an inner portion of porcelain, and an outer portion of sheet metal, the one insuring cleanliness, the other strength; and the object of this improvement is to provide a means of connecting the two aforesaid parts, which shall obviate the necessity of folding the metal upon or over the top of the porcelain, thereby enabling the sheet metal to be placed around such portion, and no more, of the porcelain as may be requisite for the proper strength and permanence of the pan.

To this end the invention consists in a novel combination of a circumferential rib and groove with the aforesaid porcelain and metal portions of the pan.

Figure 1 is a central vertical sectional view, showing one form or modification of my invention. Fig. 2 is a similar view of another form or modification thereof.

A is the inner porcelain portion of the pan, and B is the sheet-metal shell or outer portion of the same. As represented in Fig. 1, the porcelain part A is formed with an external circumferential rib, *a*, at a greater or less distance from the top or upper edge of the part A, aforesaid. The sheet-metal part, B, preferably of copper or similarly easily-spun metal, is first brought approximately to the shape by spinning or otherwise, and, being then placed upon the porcelain A, the whole

is appropriately placed in a lathe, or apparatus of any suitable kind, and the metal is spun close upon the surface of the porcelain, and, in particular, snugly upon and around the rib *a*, as represented at *a'*, the said rib, when the pan is completed, fitting into a groove of coincident shape formed in the metal, at *a'*, during the spinning of the same to place, as just described.

In the modifications shown in Fig. 2, the groove is formed in the porcelain, as shown at *c*, and the metal, being spun to fit snugly upon the porcelain, is placed thereon, and is then spun into the groove *c*, as shown at *c'*, forming a head upon the inner surface of the metal, fitting tightly into the groove, as represented in Fig. 2. It will be seen that this construction is the equivalent of that represented in Fig. 1, the position of the head and groove being simply reversed.

The metal being held firmly to the porcelain around its entire circumference, its secure retention upon the porcelain is provided for under all the exigencies of use, whether the sheet metal extends quite to the upper edge of the porcelain, as shown in Fig. 2, or terminates at a greater or less distance below the same, as indicated in Fig. 1.

What I claim as my invention is—

In a water-closet pan, the combination of the circumferential rib and groove, with the porcelain A, and the sheet-metal shell B, of a water-closet pan, whereby the said porcelain and metal shell are firmly secured together, substantially as herein set forth.

EDWIN A. LELAND.

Witnesses:

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