

(No Model.)

C. W. MARK.

HOLDER FOR ATTACHING LENSES TO ELEVATOR DOORS, &c.

No. 528,003.

Patented Oct. 23, 1894.

Fig. 1.

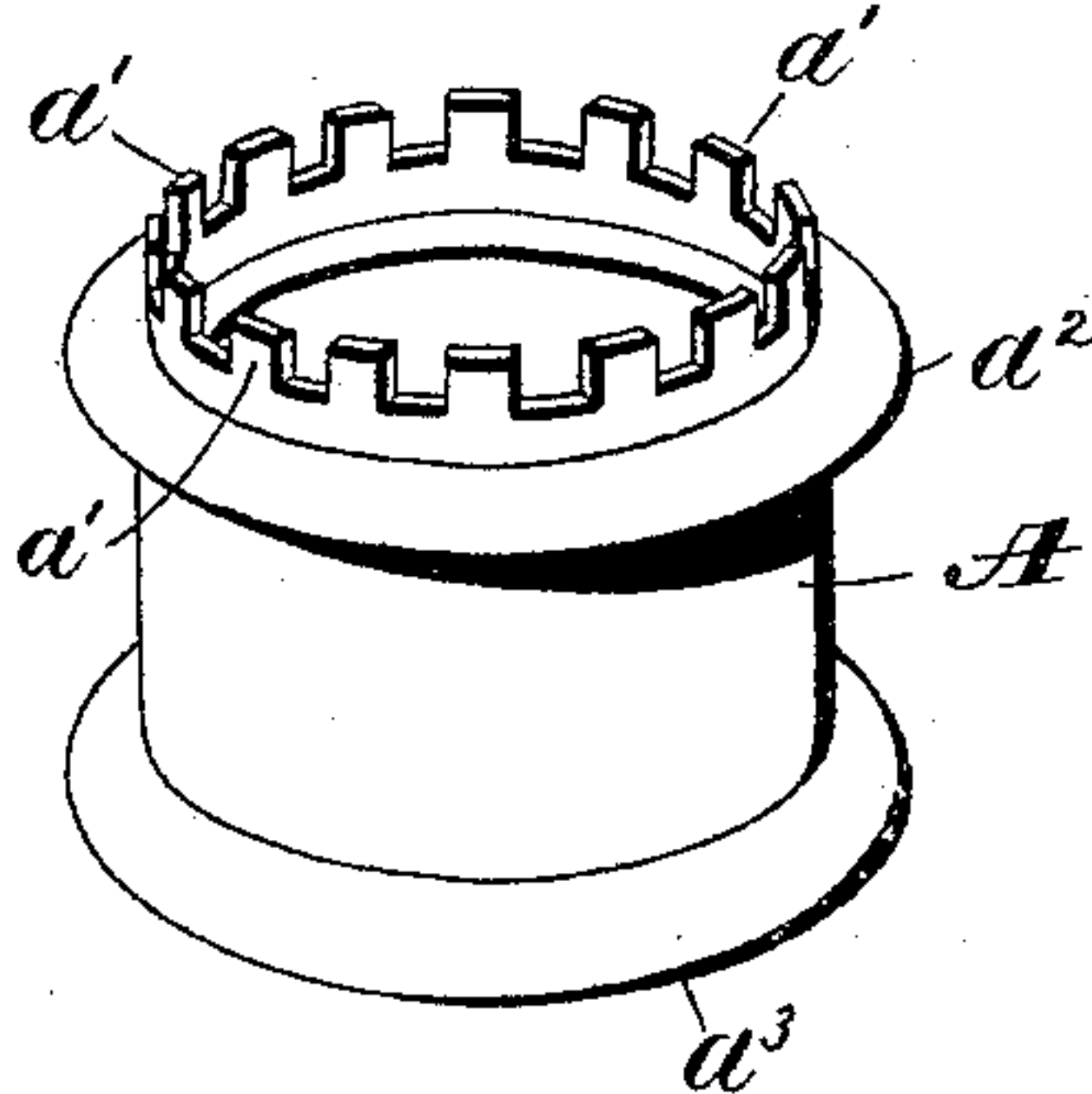


Fig. 2.

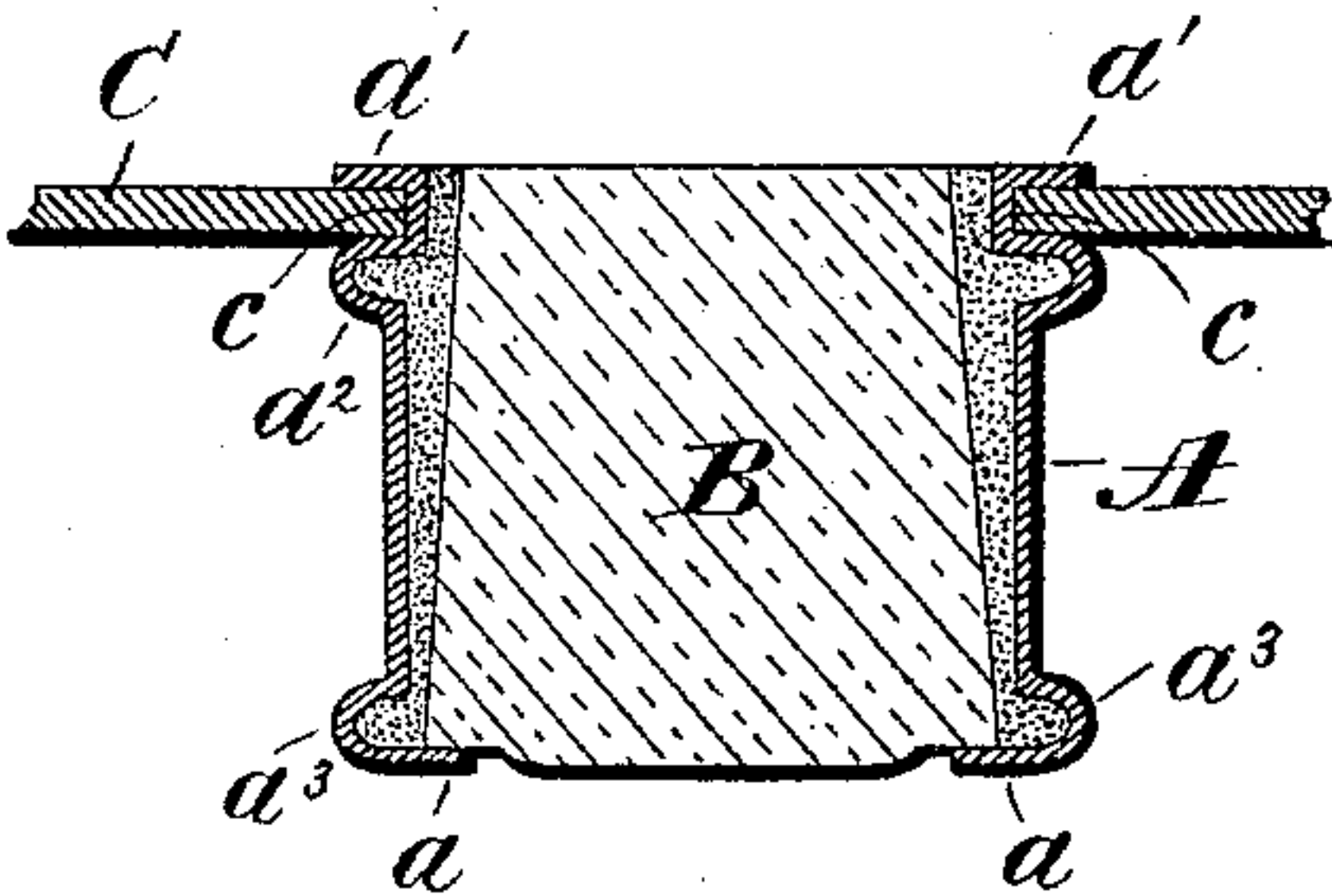
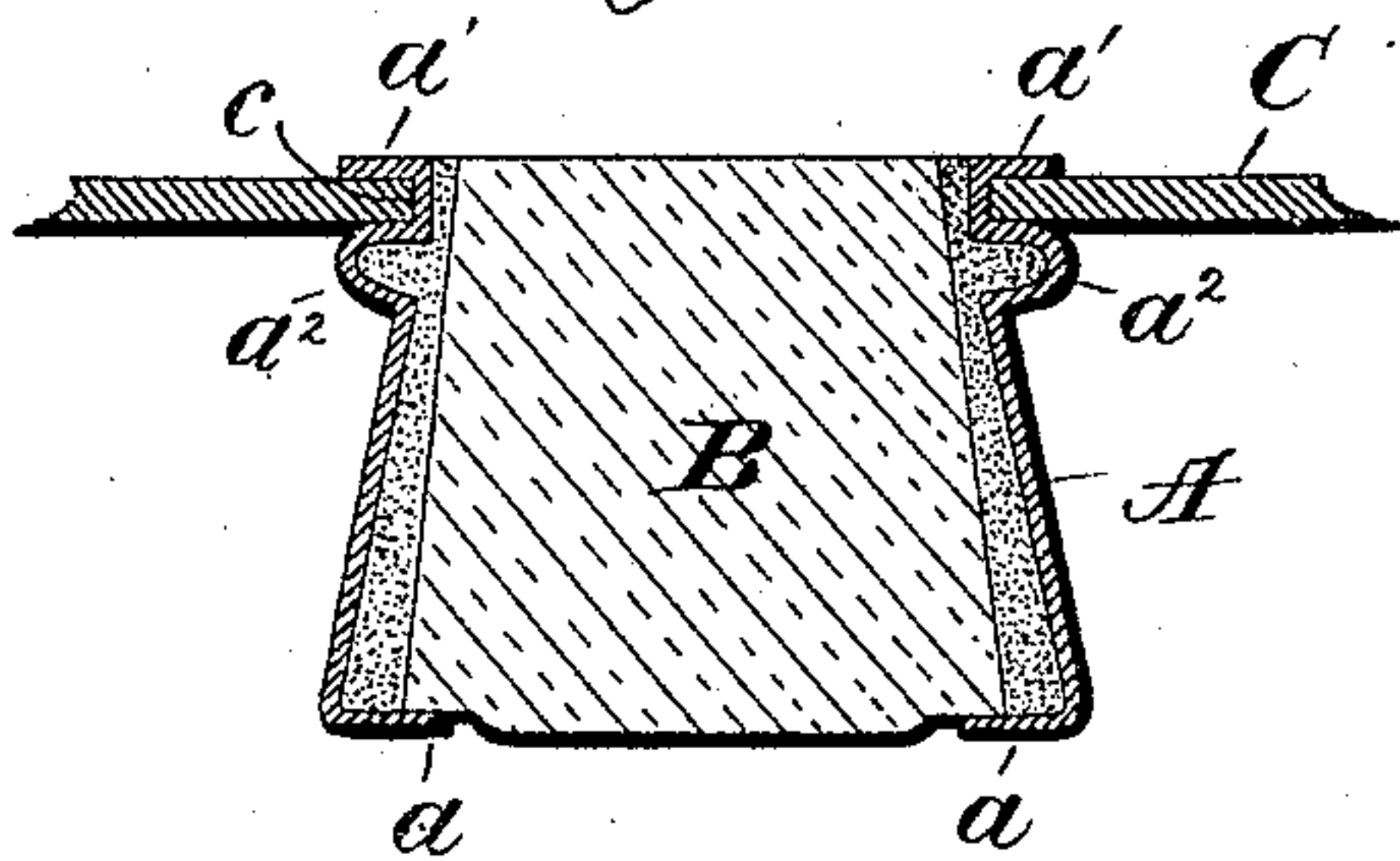


Fig. 3.



Witnesses.  
Jas. E. Hutchinson.  
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his attorneys

# UNITED STATES PATENT OFFICE.

CHARLES W. MARK, OF NEW YORK, N. Y.

## HOLDER FOR ATTACHING LENSES TO ELEVATOR-DOORS, &c.

SPECIFICATION forming part of Letters Patent No. 528,003, dated October 23, 1894.

Application filed January 9, 1894. Serial No. 496,281. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES W. MARK, of New York, in the county of New York, and in the State of New York, have invented certain new and useful Improvements in Holders for Attaching Lenses to Elevator-Doors, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a lens holder constructed in accordance with my invention; Fig. 2, a section thereof containing a lens, and applied to its place of use; Fig. 3, a like view of a different form of the holder.

Letters of like name and kind refer to like parts in the several figures.

The design of my invention is the provision of simple, easily applied, and efficient means for attaching lenses for illuminating purposes to elevator doors, area covers, &c., and which shall add as little weight thereto, as is consistent with strength and durability, and to this end said invention consists in the lens holder constructed substantially as and for the purpose hereinafter specified.

In carrying my invention into practice I construct a ring A of sheet metal, preferably brass because of its non-oxidizability, that at one end is turned inwardly to form a seat or abutment  $a$  for the inner end of a lens B, and at its other end has a number of fingers or prongs  $a'$  that are adapted to be bent outward into engagement with the edges of an opening  $c$ , in a metal plate C when said end of the ring is passed therethrough. Said fingers operate to hold or secure the ring to the plate, at one side thereof, while a circumferential enlargement  $a^2$ , thereon engages the edge of the opening  $c$  at the other side, and completes the means for attaching the ring to the plate. Said annular enlargement besides providing a shoulder to engage the plate C, also forms a cavity to receive the cement used to secure the lens within the ring, and not only results in keying the cement, but in conjunction with a like enlargement  $a^3$  at the inner end of the ring, enables the employment of but a small quantity of cement in the in-

tervening portion of the ring, and thus diminishes the weight added to the structure to which the lenses are attached, and this without unduly diminishing the security and firmness with which the lenses are held in the rings.

The enlargement  $a^3$  may be formed exactly like the one  $a^2$ , that is, having a semi-circular shape in cross-section, or as shown in Fig. 3 it may be formed by gradually increasing the diameter of the ring from the enlargement  $a^2$  toward the inner end of the ring, or that end which is turned inward to provide the seat  $a'$ .

It will be noted that my lens-holder consists only of one member which can be easily and cheaply made, and applied to use. Its strength is ample, and by reason of the provision of a body of cement at the extremities of the lens through the employment of the annular enlargements, it is especially well adapted for holding the lens against the loosening and dislodging effect of the jarring and shaking incidental to the movements of elevator doors, and the like, when the lenses are applied thereto.

I, of course, do not limit myself to holders having a ring shape, as they may be made square, hexagonal, and other shapes without departure from my invention.

The structure, consisting of metal, glass and cement, is, of course, fire proof.

Having thus described my invention, what I claim is—

A lens holder consisting of a sheet metal ring having two annular enlargements, and being at one end bent inwardly to form a lens engaging shoulder, and having at its other end fingers adapted to be bent into engagement with the edges of an opening in a plate, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 9th day of November, 1893.

CHAS. W. MARK.

Witnesses:

EDWIN A. HAVERS,  
J. D. MARK.