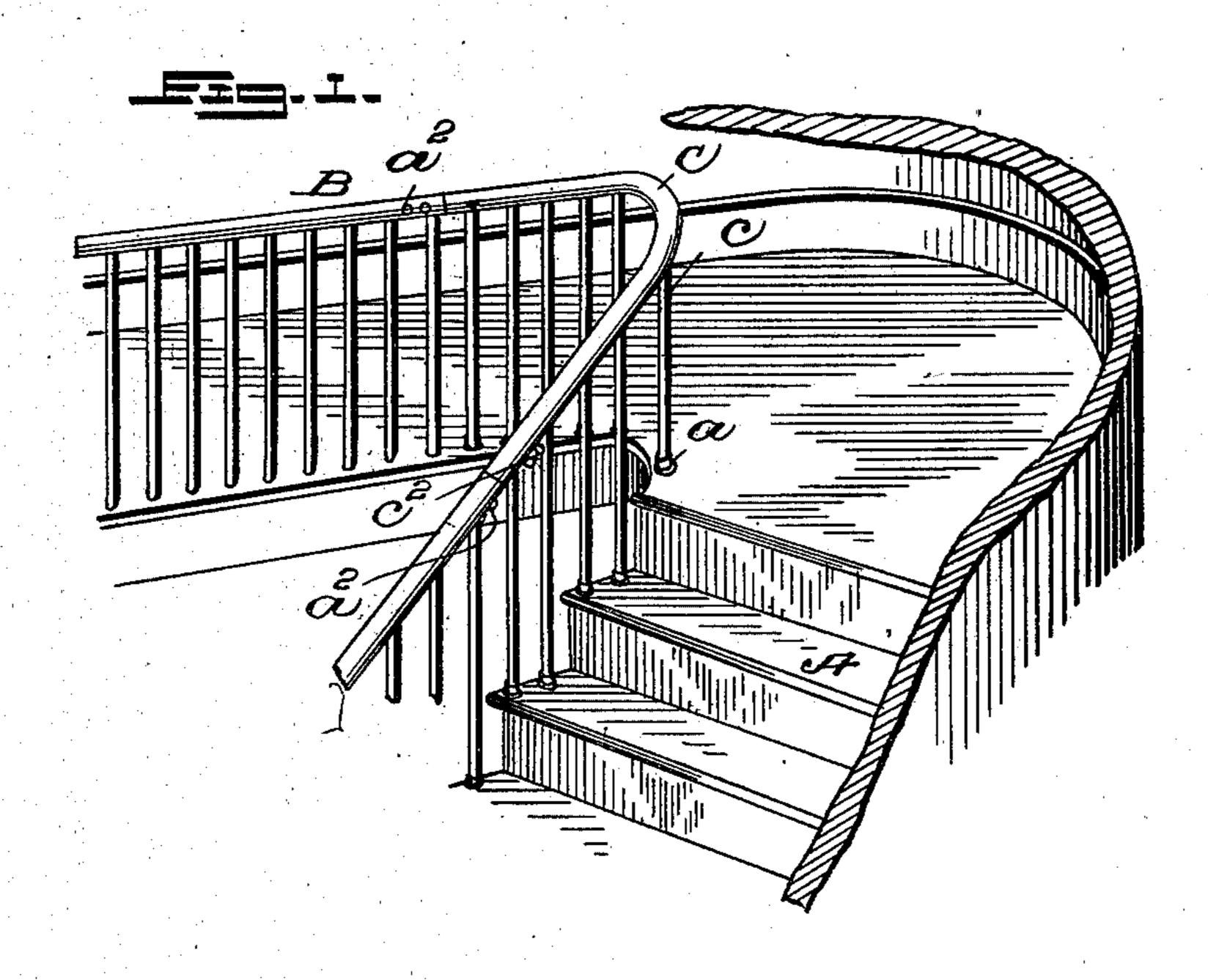
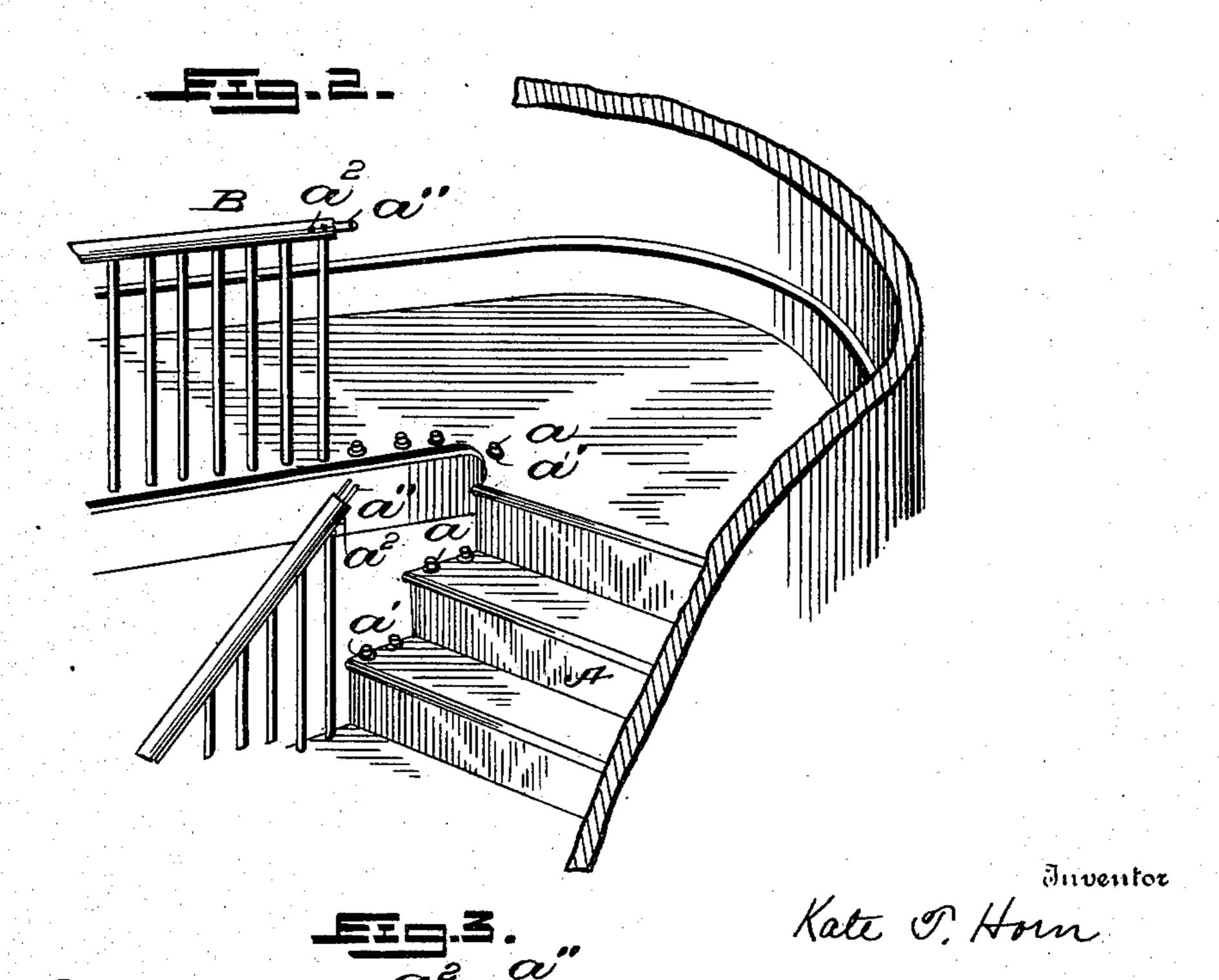
## K. T. HORN. BALUSTRADE. APPLICATION FILED JUNE 27, 1903.





Witnesses

## United States Patent Office.

KATE THÉRÈSE HORN, OF NEW YORK, N. Y.

## BALUSTRADE.

SPECIFICATION forming part of Letters Patent No. 736,399, dated August 18, 1903.

Application filed June 27, 1903. Serial No. 163,410. (No model.)

To all whom it may concern:

Be it known that I, KATE THÉRÈSE HORN, a citizen of the United States, residing at New York city, in the county and State of New York, have invented certain new and useful Improvements in Balustrades; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the letters of reference marked thereon.

In most dwellings and apartment-houses or flats much difficulty and inconvenience are experienced carrying furniture or other large articles up or down the stairways, owing to the fact that there is usually insufficient space between the wall and balustrade to permit the article being carried to pass.

It is the object of the present invention to overcome this difficulty by making the section of the balustrade constituting the "turn" removable, whereby sufficient space will be afforded to permit the passage of the furniture or other object.

To this end the invention consists in certain novel details of construction and combinations and arrangements of parts, all as will be now described, and the particular features of novelty pointed out in the claims.

Referring to the accompanying drawings, Figure 1 is a perspective view of a portion of a flight of stairs and floor-landing, showing my improved construction of balustrade. Fig. 2 is a similar view with the curved section of the balustrade or turn removed. Fig. 3 is a detail view showing the manner of connecting the removable and fixed sections of the balustrade.

Similar letters of reference in the several 40 figures indicate the same parts.

In the drawings the letter A indicates the stairs, and B the balustrade, which latter may be of any desired construction or style.

According to my invention the curved sec-45 tion or turn of the balustrade is removable from the other sections, and for this purpose it is constructed as follows:

The hand-rail C of the removable portion has secured to it as ordinarily the balusters to c; but the lower ends of these balusters instead of being fixedly secured to the steps, as usual, fit into sockets a, preferably of

metal, and secured to the steps and floor-landing. These sockets may be of any desired shape, depending upon the style and configuation of the baluster which is to fit in them, each, however, being preferably formed with a base-flange a', having openings therein for the passage of screws or other fastenings whereby the sockets are secured in place. 6 There are preferably two of these sockets on each step or a member corresponding to the number of balusters in each step.

The hand-rails of the fixed and movable sections of the balustrade are united by metal 65 plates a'', preferably two in each end and arranged horizontally, as shown, said plates being secured to the fixed sections by bolts  $a^2$ .

The plates a fit in coöperating slots c' in the ends of the hand-rail of the curved or removable section C and are held by thumb-screw  $c^2$ , passing through hand-rail and plates, as will be readily understood.

From the foregoing it will be seen that the space at the turns of the stairway may be en- 75 larged for the passage of furniture, &c., by loosening the thumb-screws and lifting the removable section out of the way; but it will be understood that the balusters are preferably permanently attached to the hand-rail 80 at their upper ends, as they would otherwise drop out and be difficult to replace, although under some circumstances the hand-rail and balusters might be separately removable, the upper ends of the balusters simply fitting 85 into sockets in the under side of the handrail. The lower ends of the balusters fit in the permanent sockets on the stairs and landing with sufficient accuracy to afford the desired rigidity and strength.

The invention is more especially applicable in those situations where the hand-rail is continuous at the turns, no post being employed, and in most situations of this kind the space outside of the balustrade at the turns is so parrow that no dangerous opening is left when the removable section is out; but at the same time the additional space acquired by the removal of the section will permit of the passage of the most bulky article of household furniture.

Having thus described my invention, what I desire to secure by Letters Patent is—
1. In a stairway-balustrade, the combina-

tion with the fixed sections of the removable curved section or turns, the permanent sockets on the stairs in which the lower ends of the balusters of the curved section are removably fitted, and means for detachably securing the curved section to the fixed sections of the balustrade; substantially as described.

2. In a stairway-balustrade, the combination with the fixed sections having the plates secured to the ends of the hand-rails of the removable curved section having a hand-rail with slots for the reception of the plates, the thumb-screw for securing the sections together, and the sockets on the stairway in which the ends of the balusters of the curved

section are removably secured; substantially as described.

3. In a stairway-balustrade the combination with the fixed sections and removable sections at the curve of the overlapping joining sections of the hand-rails, locking means for securing the overlapping sections together, the sockets on the stairway in which the lower ends of the balusters of the removable section are removably secured; substan-25 tially as described.

KATE THÉRÈSE HORN.

Witnesses:
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