

(No Model.)

E. F. HARTSHORN.  
ATTACHING WINDOW SHADES TO ROLLERS.

No. 572,294.

Patented Dec. 1, 1896.

Fig. 1

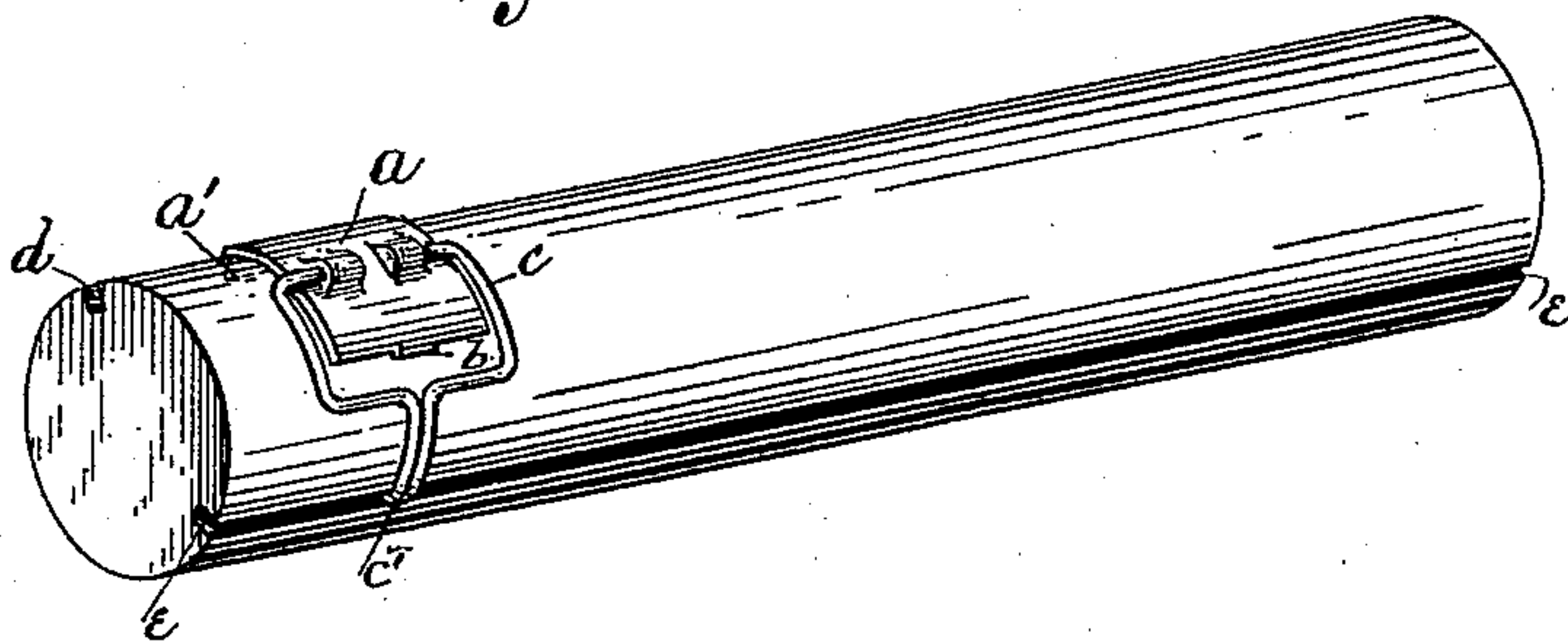


Fig. 4

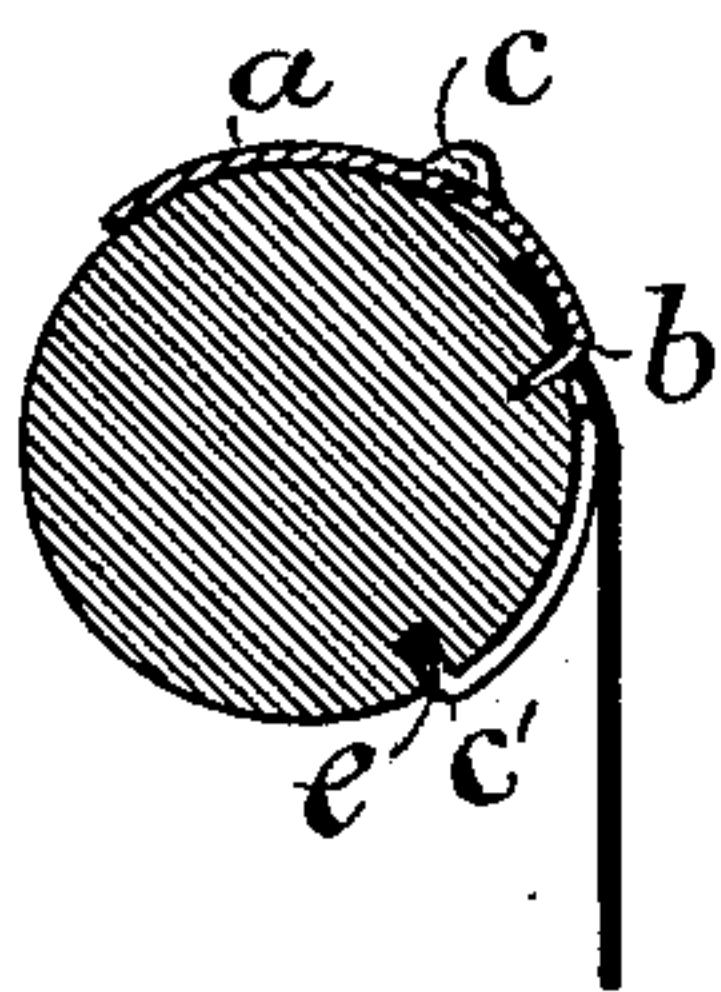


Fig. 2

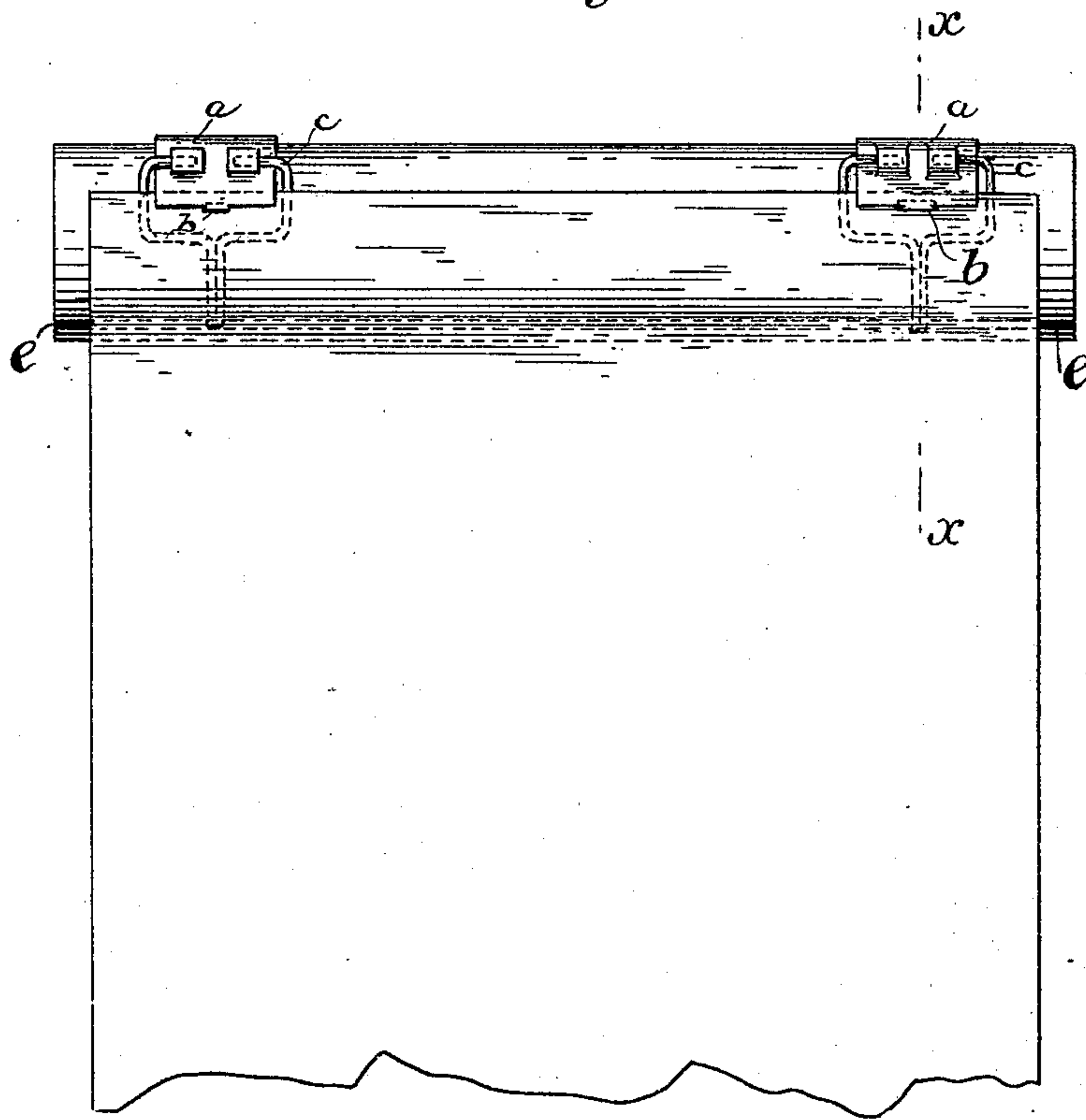
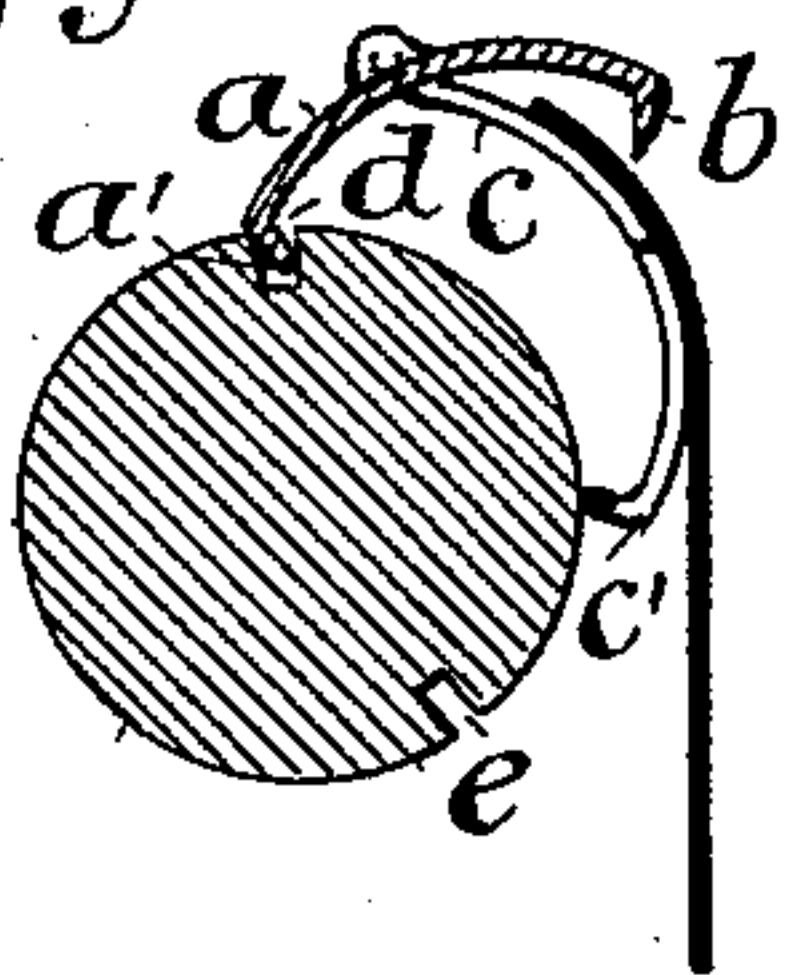


Fig. 3



Witnesses  
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# UNITED STATES PATENT OFFICE.

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## ATTACHING WINDOW-SHADES TO ROLLERS.

SPECIFICATION forming part of Letters Patent No. 572,294, dated December 1, 1896.

Application filed September 27, 1895. Serial No. 563,821. (No model.)

*To all whom it may concern:*

Be it known that I, EDMUND F. HARTSHORN, a citizen of the United States, and a resident of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Attaching Window-Shades to Rollers, of which the following is a specification.

My improvement relates to that class of shade-attaching devices in the form of clasps which partially encircle the roller, and is an improvement on the fastener previously invented by me and described and claimed in Letters Patent No. 484,962 granted October 25, 1892.

In the accompanying drawings, illustrating this invention, Figure 1 is a view of the roller with the fastener in place on the same. Fig. 2 is a view showing the shade attached to the roller by this fastening. Fig. 3 is a sectional view of the roller and fastener, showing the method of attaching the shade; and Fig. 4 is a modification.

The drawings show a wooden roller, but the attaching device may be used equally well with a metal roller of the same construction.

The attaching device or holder shown in Figs. 1, 2, and 3 consists of a short clasp *a*, of thin sheet metal, conformed to fit the surface of the roller, having one edge, as *a'*, bent at an acute angle with the surface and provided at the opposite edge with a pointed tooth or spur *b*, arranged to penetrate the roller when the holder is in place on the latter. Connected to the top or outer surface of the clasp *a*, so as to turn thereon, is a wire hook *c*. This is preferably constructed in the form shown in the drawings and is of such a length as to enable the clasp and hook to partially encircle the roller. The outer end *c'* of the hook is bent inward to correspond with the edge *a'* of the clasp. In the surface of the roller are two radial longitudinal grooves *d e*. These grooves are placed at a distance from each other a little greater than the length of the holder when detached, and are intended to receive the bent ends *a'* and *c'*, respectively, of the clasp and hook. The method of attaching the holder is as follows: The edge of the shade is placed between the clasp *a* and the upper part of the hook *c*, so as to be under

the spur *b* on the clasp, as is shown in Fig. 3. The bent end *a'* of the clasp is then inserted in the groove *d* of the roller and the hook *c* brought down on the roller and sprung around the latter until the bent end *c'* slips into the groove *e*. The spur *b* is thus forced down on the roller and made to pierce the shade and enter the side of the roller, as is seen in Fig. 2.

In the modified construction shown in Fig. 4 the end *a'* of the clasp is straight or of the same curve as the rest of the clasp and merely rests on the roller. With this construction of the clasp but one groove *e* for the end *c'* of the hook is required. With this fastener the shade is securely attached to the roller by the spur *b*, and by reason of the bent end of the hook in the groove in the roller the fastener cannot be pulled away or detached from the roller by any pull in any direction of the shade, the spur *b* and end *c'* of the hook resisting the pull of the shade in any direction. In this improved hinged fastener the spur or tooth on the upper clasp or plate penetrates the roller and fastens the shade to the latter, and the shade is not held between the two parts of the fastener, as in my former construction, the hook part *c* merely serving to hold the spur *b* in the roller and prevent any pull on the shade from drawing out the spur or detaching the fastener.

I claim—

1. As a new article, a fastener for attaching shades to rollers consisting of the clasp *a* provided with the spur *b* arranged to penetrate the shade and roller, and the hook *c* hinged to the clasp *a* and provided on the end with means for engaging with the roller whereby the clasp and spur are held in place on the roller, substantially as described.

2. In a fastening for attaching shades to rollers, in combination, a clasp *a* provided with the spur *b* arranged to penetrate the shade and roller, and a hook *c* hinged to the clasp and provided with the bent end *c'* adapted to engage with a groove in the roller, substantially as described.

EDMUND F. HARTSHORN.

Witnesses:

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