

(No Model.)

W. NACK.
SHADE FASTENING SPRING.

No. 289,925.

Patented Dec. 11, 1883.

fig. 1.

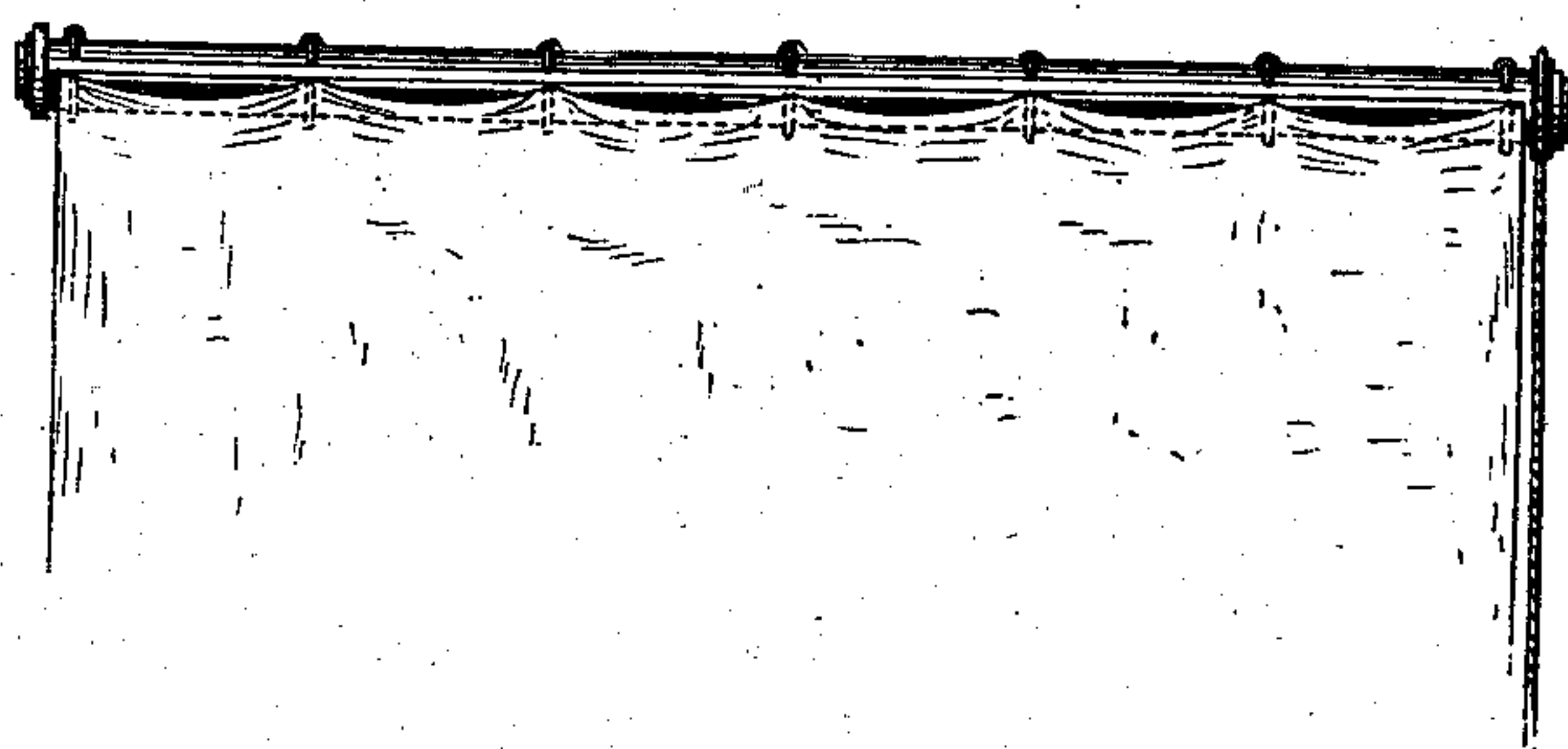


fig. 2.

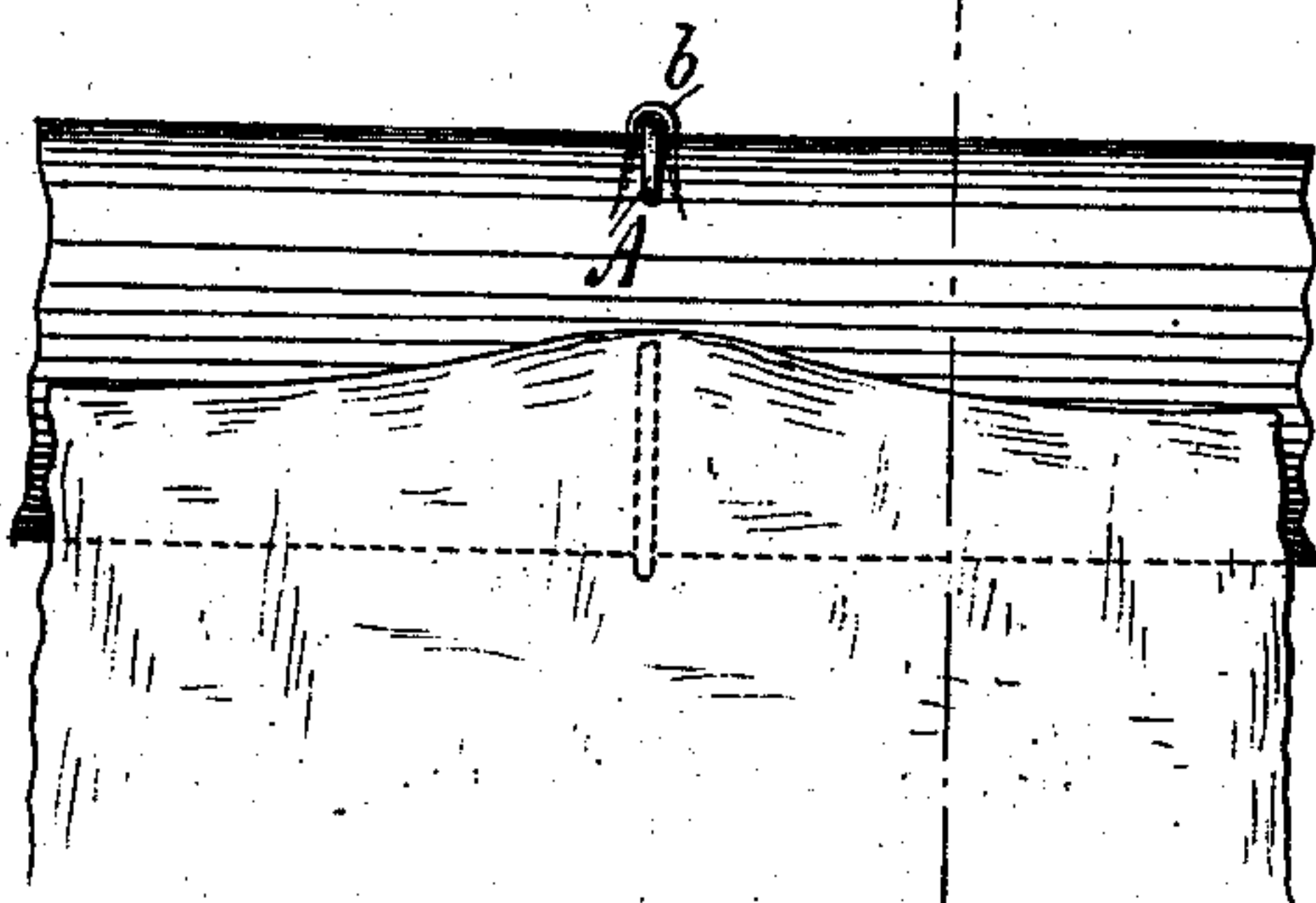


fig. 3.

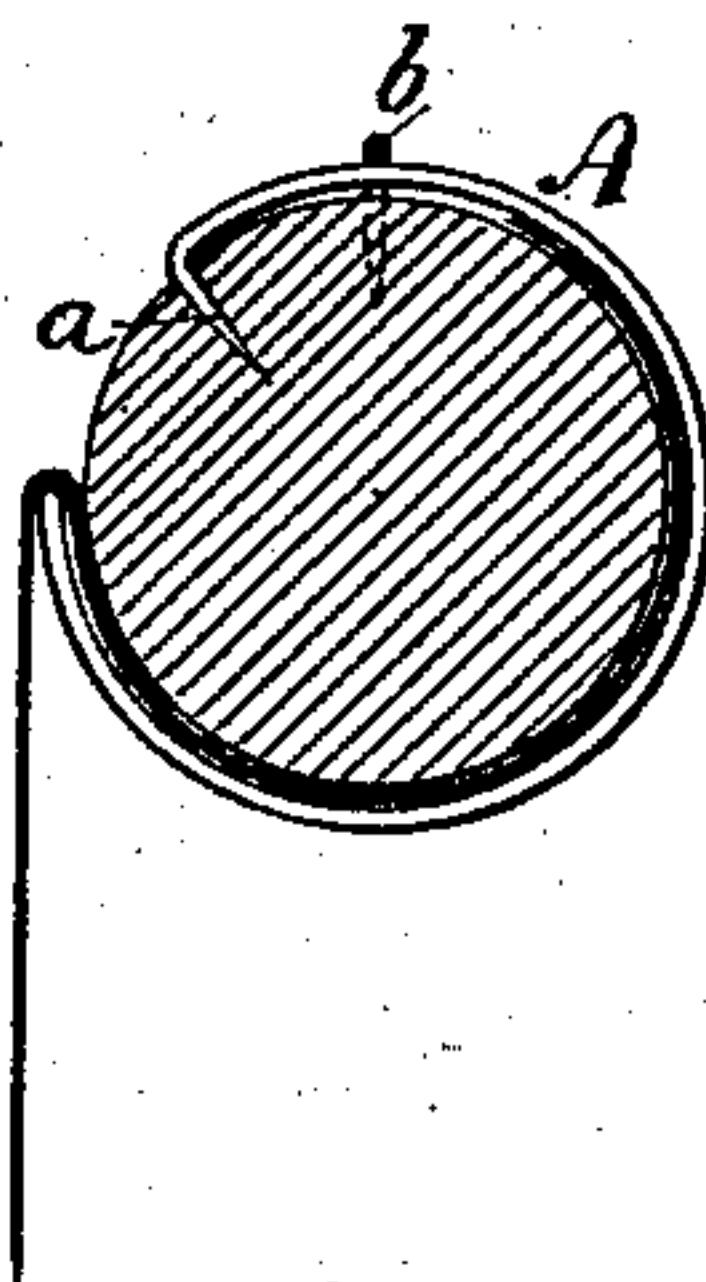


fig. 4.

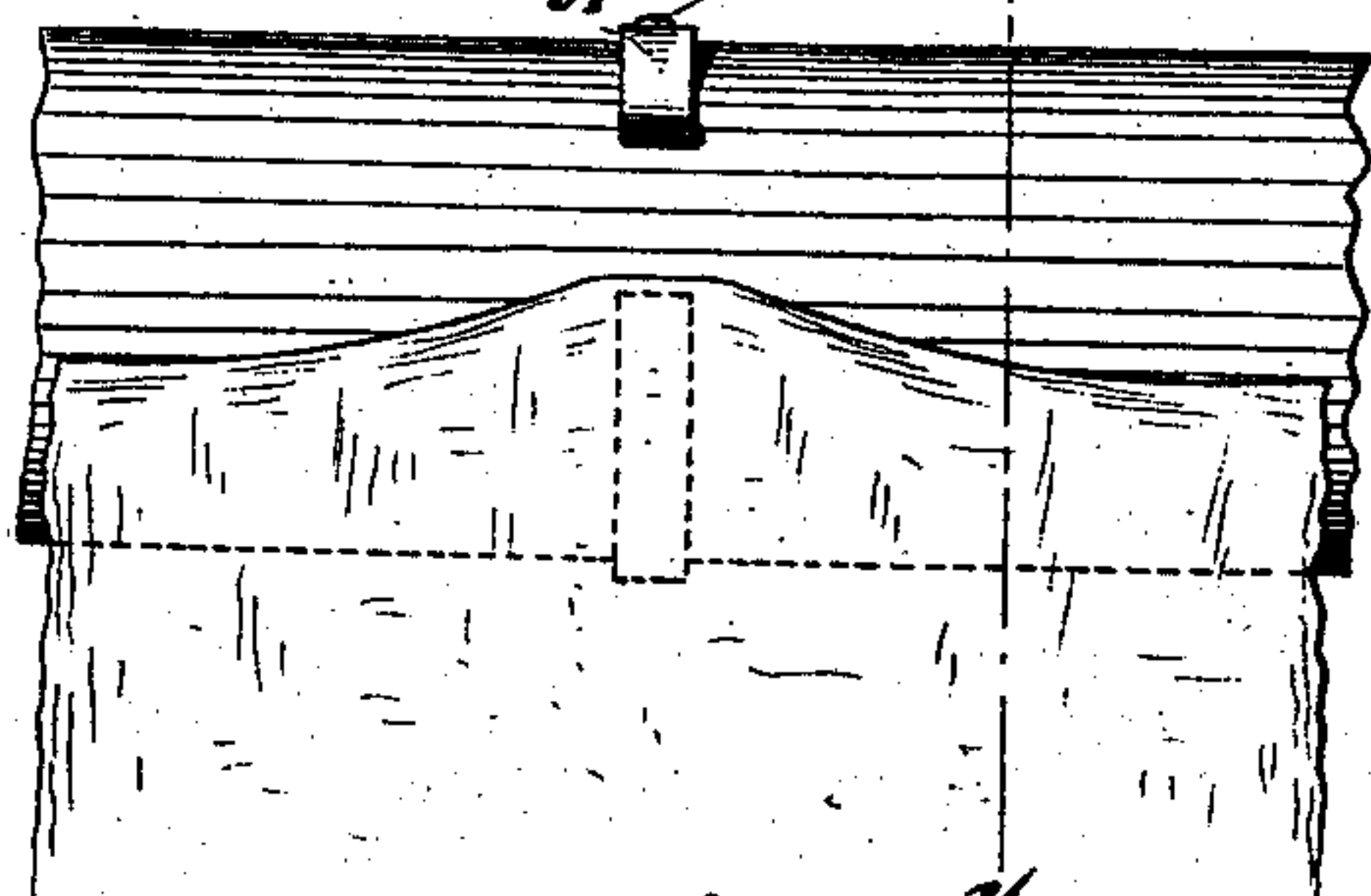


fig. 5.

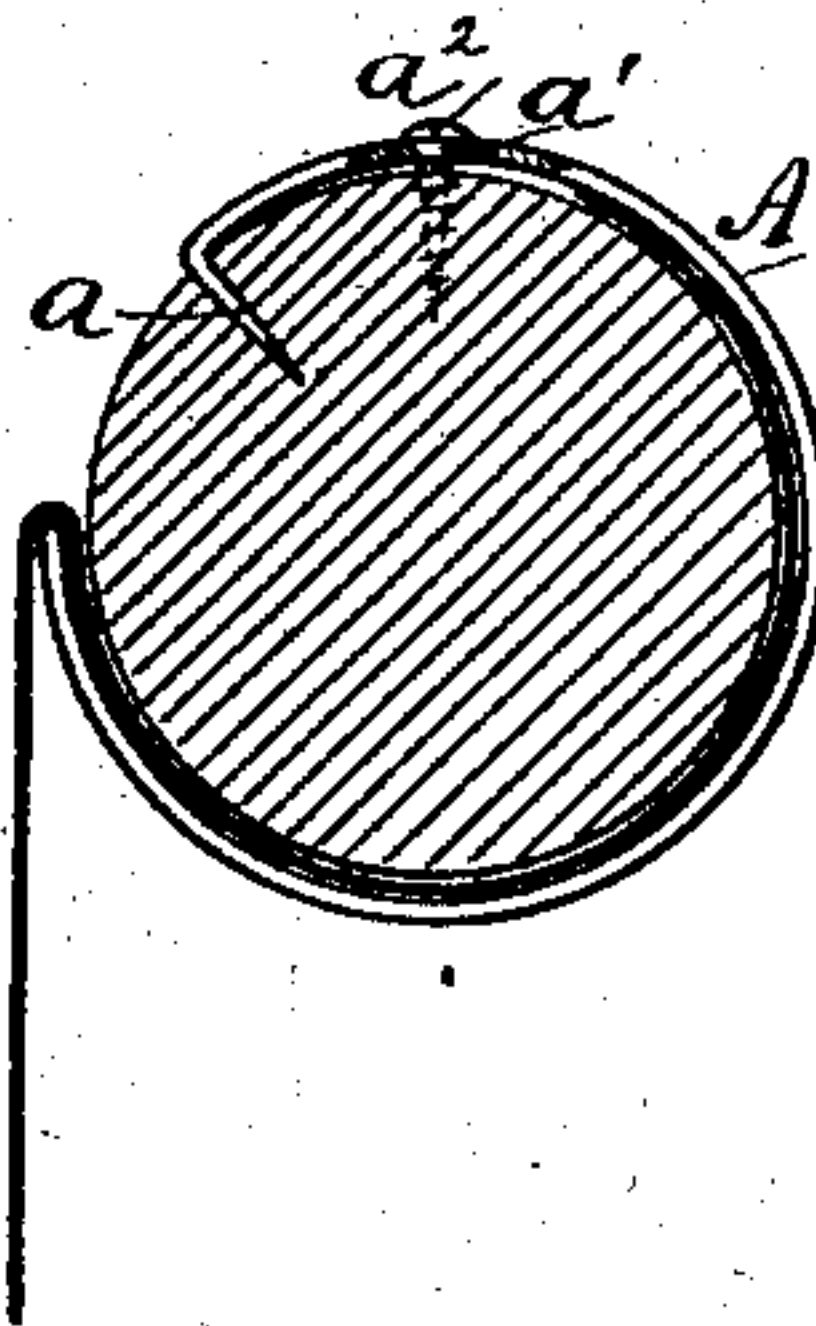


fig. 6.

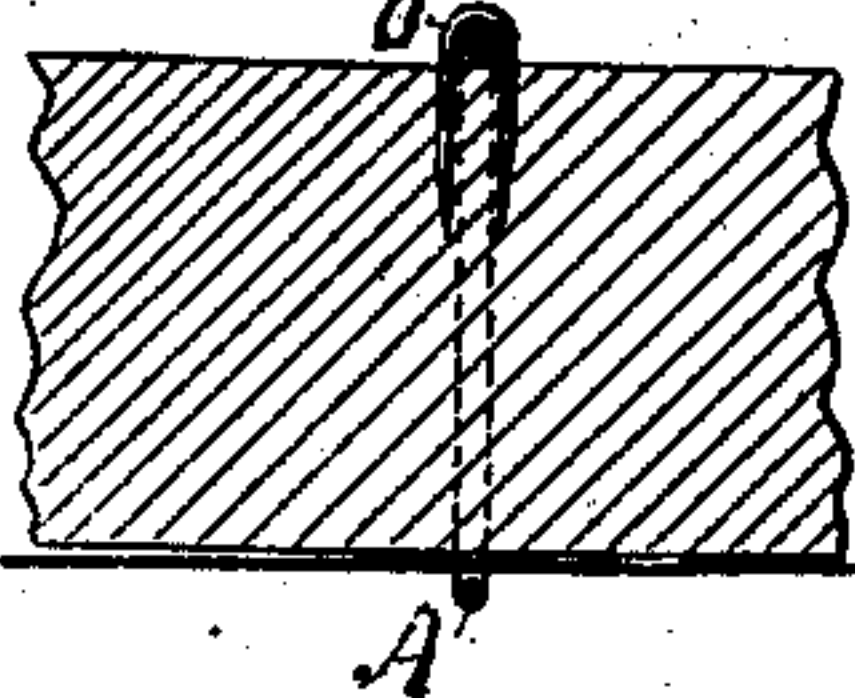
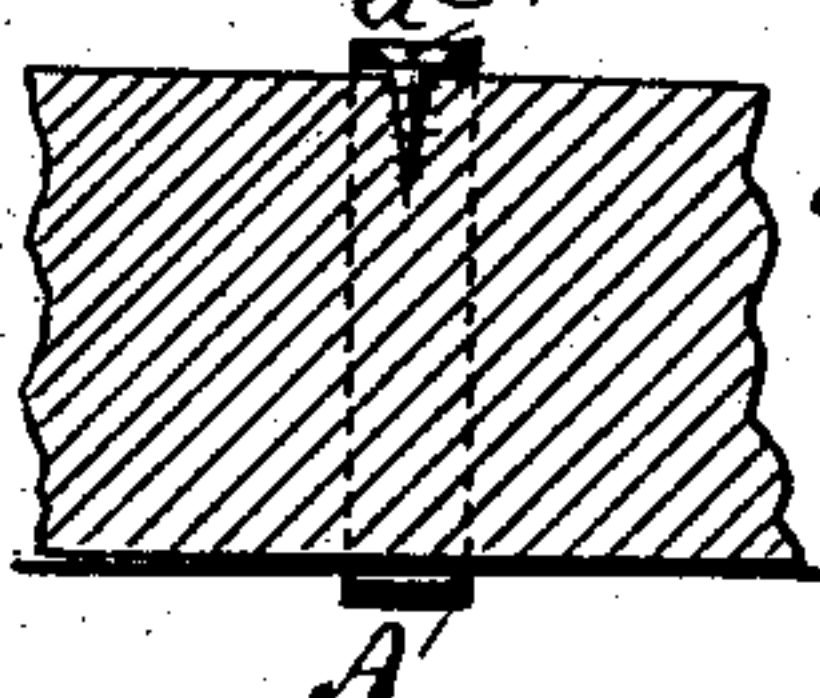


fig. 7.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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SHADE-FASTENING SPRING.

SPECIFICATION forming part of Letters Patent No. 289,925, dated December 11, 1883.

Application filed August 30, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM NACK, of Sheboygan, county of Sheboygan, and State of Wisconsin, have invented certain new and useful Improvements in Shade-Fastening Springs, of which the following is a specification.

The object of this invention is to furnish a cheap and convenient device for the attachment of shades to rollers without perforating or injuring the shade, and which will admit of the ready removal of the shade from the roller.

In the accompanying drawings, Figure 1 represents a curtain-roller with a shade attached thereto by my retaining-springs. Fig. 2 is a detail view of a shade-roller and shade-holding spring; Fig. 3, a vertical transverse section on line *xx*, Fig. 2. Figs. 4 and 5 represent, respectively, a front view and a vertical transverse section on line *yy*, Fig. 4, of a modified form of the shade-holding spring; and Figs. 6 and 7 are vertical longitudinal sections of the roller with the shade-fastening spring.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents a metallic spring, that is preferably made of wire of suitable thickness, or of a flattened strip of metal. The spring A is made nearly circular in shape, of a diameter corresponding to the diameter of the shade-roller to which it is to be applied. One end, *a*, of the spring A is bent inwardly and driven into the shade-roller, so that the spring A nearly encircles the roller. The spring A is further secured to the roller by a staple, *b*, that is driven into the roller over the

spring A near the fixed end *a*, as shown in dotted lines in Figs. 2 and 3. When the spring A is made of a flat strip of metal, a hole, *a'*, is arranged near the bent end *a* of the spring, and the spring secured by a screw, *a''*, as shown in Fig. 4. A number of shade-holding springs are applied to each roller, according to the size of roller and weight of shade, and the upper end of the shade inserted between the roller and the springs, whereby the shade is securely attached to the roller, as shown in Fig. 1. By this mode of attachment, the shade can be readily removed therefrom at any time for washing or other purposes.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A fastening for attaching shades to rollers, consisting of a circular spring adapted to fit the roller and extending through more than half a circle, provided at one end with a bent prong integral therewith, adapted for insertion in the roller, the free end being plain, substantially as described.

2. The combination of a shade-roller, a circular spring adapted to fit said roller and extending through more than half a circle, provided with an attaching bent prong inserted in the roller, and a screw or staple near the bent prong for further securing said spring to said roller, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

WM. NACK.

Witnesses:

HANS SCHEER,
A. KROPF.