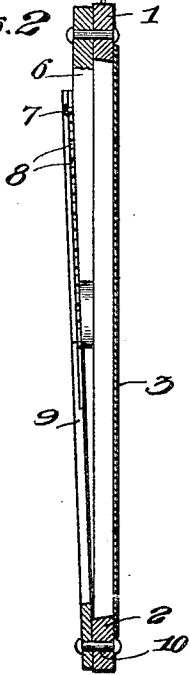
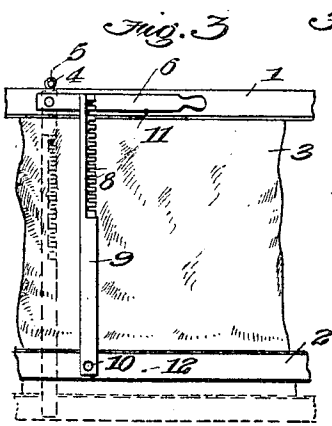
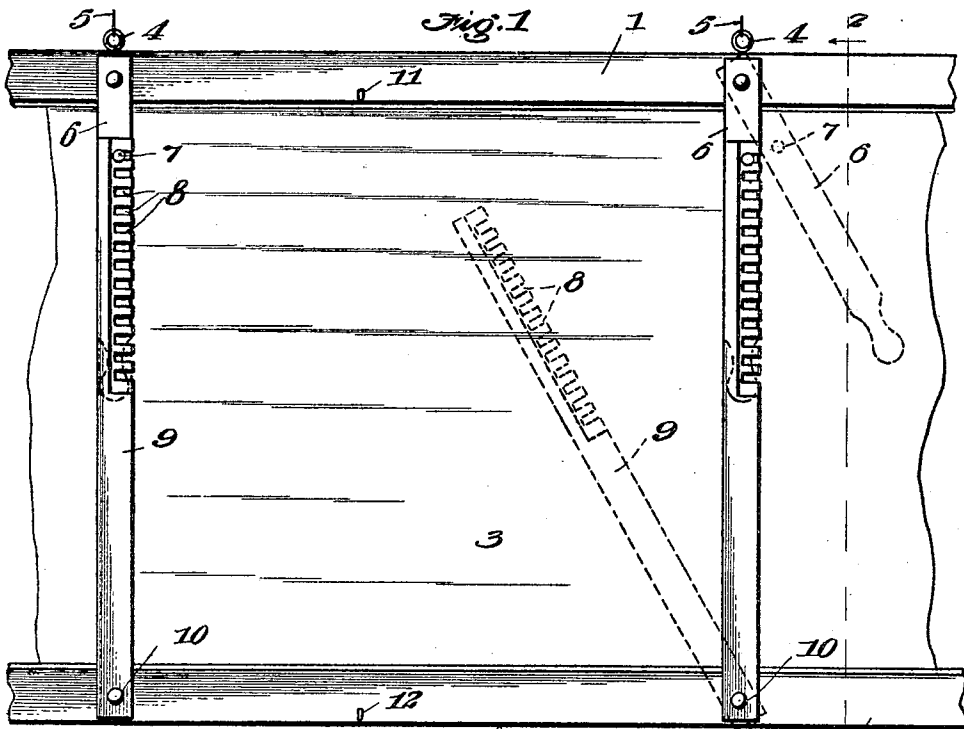


No. 801,077.

PATENTED OCT. 3, 1905.

L. B. GIRARD.  
SHADE CLOTH STRETCHER.  
APPLICATION FILED FEB. 1, 1905.



Witnesses  
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# UNITED STATES PATENT OFFICE.

LOUIS B. GIRARD, OF LOS ANGELES, CALIFORNIA.

## SHADE-CLOTH STRETCHER.

No. 801,077.

Specification of Letters Patent.

Patented Oct. 3, 1905.

Application filed February 1, 1905. Serial No. 243,763.

*To all whom it may concern:*

Be it known that I, LOUIS B. GIRARD, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Shade-Cloth Stretchers, of which the following is a specification.

The object of my invention is to provide a simple, convenient, and adjustable frame upon which the fabric out of which shades are made can be conveniently mounted and stretched preparatory to placing thereon the proper sizing. I accomplish this object by means of the device described herein and shown in the accompanying drawings, in which—

Figure 1 is an elevation of my device in which the cloth to be treated is in its stretched position. Fig. 2 is a transverse longitudinal section taken on line 2 2 of Fig. 1. Fig. 3 is the position of the device before the fabric thereon is stretched for sizing, the dotted lines showing the position of the parts when in position for sizing.

In the drawings, 1 and 2 represent the top and bottom rails, respectively, of the frame upon which the cloth 3 is pasted preparatory to being sized. The upper rail 1 is supported by the eyelets 4, which are usually connected to the ceiling by means of the strings or wires 5. Pivotally mounted on the upper rail are the hand-levers 6, upon which are mounted the engaging lugs 7, adapted to be thrown into the catches 8 on the catch-bar 9. This bar is pivotally mounted, as at 10, on the lower rail 2.

In using my device the cloth to be sized is pasted on the back part of the rail 1, and the lower part of the cloth is pasted to the lower rail 2, as shown in Fig. 2. The device being in the contracted or inoperative position, as shown in full lines in Fig. 3, the cloth is then pasted to both the upper and lower rails. The frame is then in the position shown in Fig. 3. The lever 6 is then thrown down into the vertical position shown in dotted lines. This will operate to spread the rails apart, depressing the lower rail 2 down into the dotted position shown in Fig. 2 and stretching the fabric pasted thereon from a width extending from the full lines above to the dotted lines below. The levers 6 and catch-bar 9 will then assume the position shown in dotted lines in Fig. 3. When the fabric to be operated upon is stretched, as shown in dotted lines in Fig. 3, the back side thereof is sized with appropriate sizing, and

after having sufficiently dried the hand-lever is turned over into and rests upon catch 11, as shown in Fig. 3, and the catch-bar 9 is dropped down into and rests upon catch 12. When the hand-lever and catch-bar are thus moved out of the way, the front of the cloth is then sized, and after the same has properly dried the catch-bar is thrown into the position shown in full lines in Fig. 3 and will support the lower rail, when the cloth can be removed from the frame and new cloth placed thereon and the operation repeated.

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

1. A device to stretch shade-cloth comprising an upper and a lower rail to which the cloth to be stretched is pasted or otherwise secured, in combination with means to adjustably secure said rails together, comprising a hand-lever pivotally mounted on the upper rail and carrying on the side thereof a catch-engaging lug; a catch-bar pivotally mounted on the lower rail and having a plurality of catches thereon and adapted when thrown into its vertical position to engage the lug on the hand-lever and spread the rails apart and stretch the cloth secured thereon.

2. A shade-stretcher comprising an upper and a lower rail, the upper rail carrying a plurality of hand-levers pivotally mounted thereon, the said hand-levers each having a catch-engaging lug projecting therefrom, the lower rail having a plurality of pivotally-mounted catch-bars, each having on the face thereof a plurality of catches adapted to engage the lugs on the hand-bars and spread the rails apart when the lever and the bar are thrown into the vertical position.

3. The herein-described device to stretch shade material comprising an upper and a lower rail 1 and 2 respectively; a hand-lever 6 pivotally mounted on the upper rail and having on the side thereof a catch-engaging lug 7; a catch-bar 9 pivotally mounted on the lower rail and having on the free end thereof a plurality of catches 8 adapted to engage the lug 7 when the lever and the bar are both in a vertical position.

In witness that I claim the foregoing I have hereunto subscribed my name this 26th day of January, 1905.

LOUIS B. GIRARD.

Witnesses:

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