(No Model.)

W. B. SHAW.

EXTENSIBLE TIP FOR SHADE ROLLERS.

No. 564,111. Patented July 14, 1896.

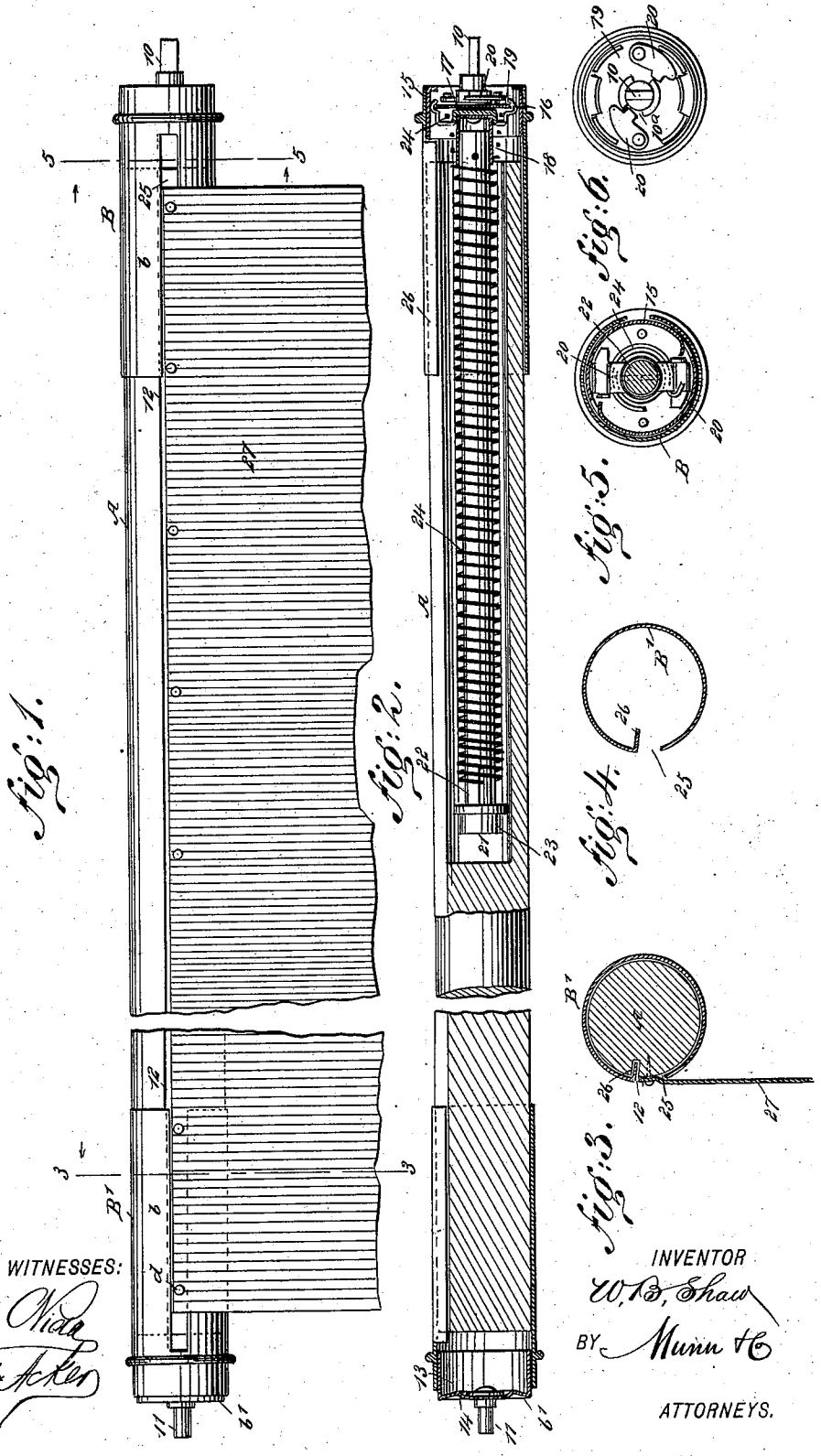

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6.

WITNESSES:

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EXTENSIBLE TIP FOR SHADE-ROLLERS.

SPECIFICATION forming part of Letters Patent No. 564,111, dated July 14, 1896.

Application filed July 3, 1895. Serial No. 554,850. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM B. SHAW, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Extensible Tips for Shade-Rollers, of which the following is a full, clear, and exact description.

My invention relates to an improvement in shade-rollers, especially to that type of rollers known as "spring-rollers;" and the object of the invention is to provide tips for the ends of the roller capable of being adjusted horizontally, so that a shade when attached to a roller of this description may be centered, whereby the same roller may be used on a window which is much wider, and the adjustment may be accomplished without interfering in the least with the spring contained in the roller.

A further object of this invention is to accomplish the above results by means of a construction which will be simple, durable, and economic.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improved shade-roller. Fig. 2 is a longitudinal section through the same. Fig. 3 is a transverse section taken substantially on the line 3 3 of Fig. 1. Fig. 4 is a transverse section through the tip removed from the roller. Fig. 5 is a section taken substantially on the line 5 5 of Fig. 1, and Fig. 6 is an end view of that portion of the roller containing the spring.

In carrying out the invention the shade-roller A is provided with a sliding tip at each end, that at the spring end of the roller being designated as B and that at the opposite end as B′. The tip B is provided with the usual squared trunnion 10 and the tip B′ with the round trunnion 11 of the shade-roller, and the roller itself has a longitudinal slot 12 produced therein at its ends, and if desired the slot may be continued the entire length of the roller to form a guide for the attachment of the shade. The tip B′ is provided with a head 14, to which the round trunnion 11 is secured, and this head has connected therewith a sleeve 13, the latter fitting snugly in or being secured to the interior or exterior of the aforesaid tip. The tip B is usually provided also at its outer end with an interior sleeve 15, and within this sleeve a cross-bar 16 is located, secured in the sleeve in any suitable or approved manner, the said cross-bar having a pocket 17 formed therein for the reception of a cap 18, and a disk 19 is placed in front of the cross-bar, being secured thereto and extending in engagement with the inner face of the sleeve 15.

The squared trunnion 10 of the shade-roller is pivoted in the disk and cross-bar and is attached to the cap 18, as shown in Fig. 2, and the trunnion outside of the disk is enlarged and has recesses 10^a formed in its enlarged portion, as shown in Figs. 2 and 6, to receive pawls 20 located on the disk 19.

A bore 21 is made in the end of the roller covered by the tip B, as shown in Fig. 2, and the bore contains a rod 22, which is loosely fitted in the cap 18 at one end, and is provided with a head 23 at its inner end, which fits in the aforesaid bore.

A spring 24 is secured to the inner end of the rod 22, is coiled around the said rod, and is attached at its opposite end to the cross-bar 16 in the tip. This construction of the spring and the connection therewith of the squared trunnion is substantially that ordinarily used in spring-rollers, and I do not claim such as my invention, since the spring may be connected in any other approved manner with the tip B so that it will move outward with the tip; and in order to prevent the tips from turning, especially the tip through which the spring passes or with which the spring is connected, each tip is provided with a longitudinal slot 25 extending through its inner end, and a flange 26 forming one wall of this slot, the flange being made to enter the slot 12 in the shade-roller, and the slot and flange serve in addition to prevent a rotary movement of the tip and guide it in its sliding movement, and the slot 25 in the tip permits the attachment of the shade 27 to the roller close to the edge of the same.

It will be seen that the shades may be tacked to the rollers ready for sale and that the slotted

tips may be adjusted equal distances from the ends of the roller to suit different widths of windows as the slots receive the edges of the shade and permit the tips to slide. Moreover, the flanges prevent the roller from rotating in the tips, which would tend to sever the shade.

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

1. The combination with a shade-roller having a bore in one end, of a tip fitted to slide on the bored end of the roller and provided with a longitudinal slot for permitting the shade to be secured to the end of the roller over which the tip fits, and a spring mechanism carried by and movable with said tip, substantially as described.

2. The combination with a shade-roller having a bore in one end and provided with a longitudinal groove at said bored end, of a tip provided with a longitudinal slot having a flange along one edge of the same, the said slot serving to permit the shade to be secured to the end of the roller over which the tip fits, and a spring mechanism carried by and movable with the tip, substantially as described.

3. A longitudinally-grooved curtain-roller having a bore in one end and provided at both ends with tubular extensible tips each longitudinally slotted from its inner end to receive the shade and allow of longitudinal adjustment, an inturned flange along one edge of each slot and entering the roller-groove to prevent rotary motion between the roller and the tips, a trunnion on the end of one tip and a rotary spring-carrying rod mounted in the other tip and entering the roller-bore, the outer end of the said rod projecting beyond the tip and forming the squared trunnion for that end of the roller and a pawl-and-ratchet mechanism connecting the said tip and rod, substantially as described.

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Witnesses:
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