

(No Model.)

T. A. FONTAINE.
MEANS FOR ATTACHING WINDOW SHADES TO ROLLERS.
No. 542,703.

Patented July 16, 1895.

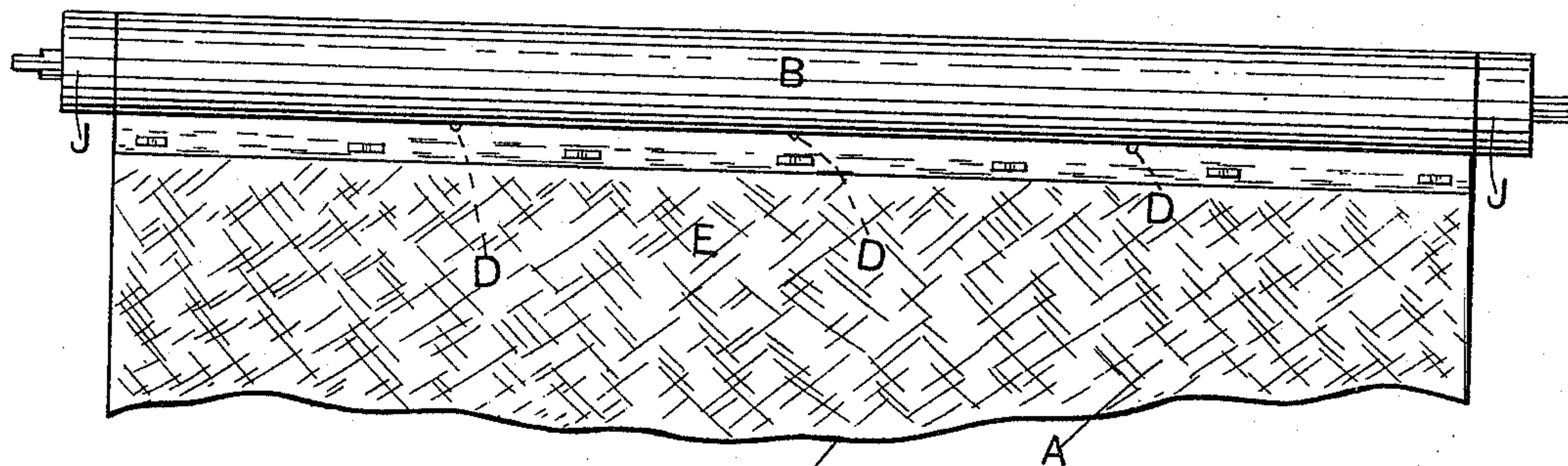


Fig. 1.

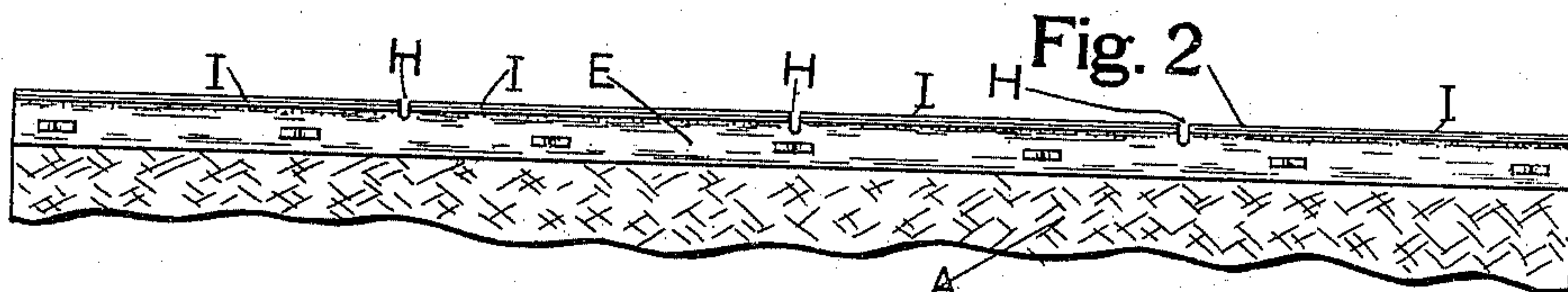


Fig. 2.

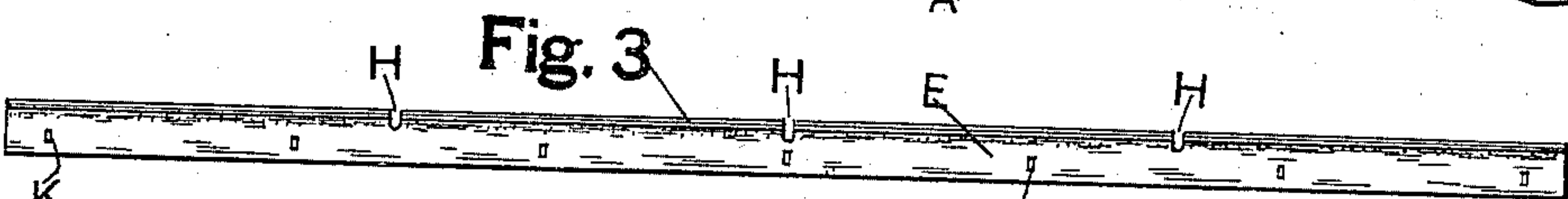


Fig. 3.

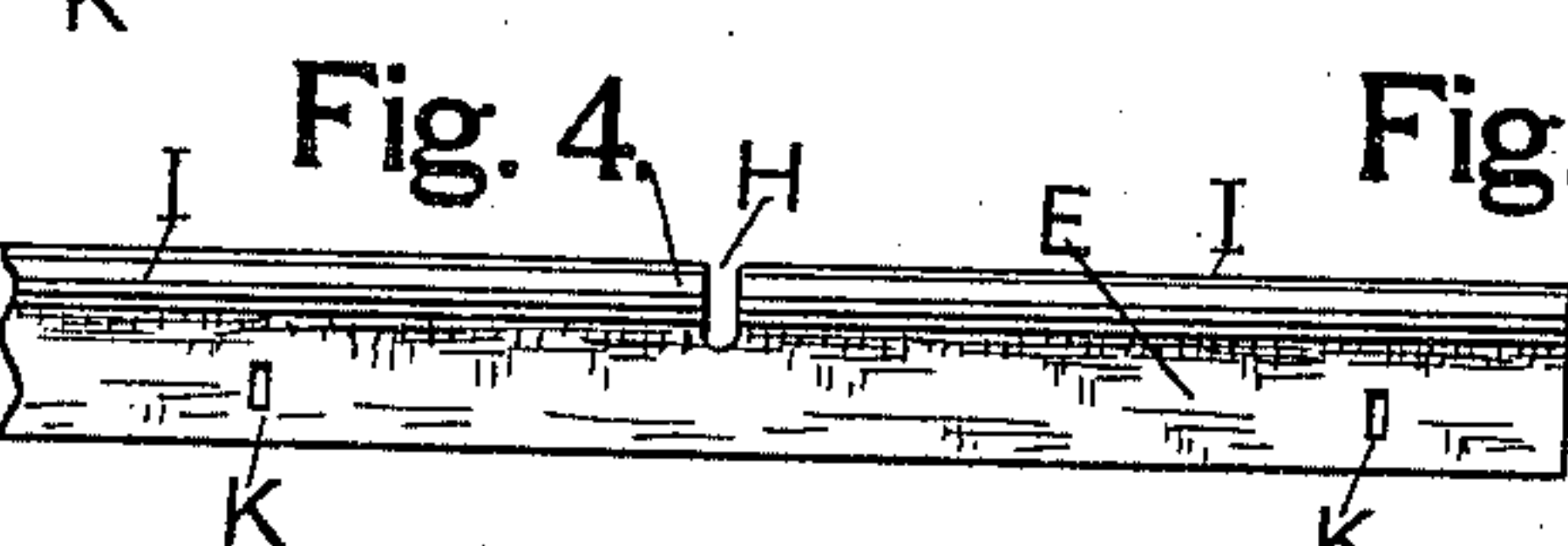


Fig. 4.

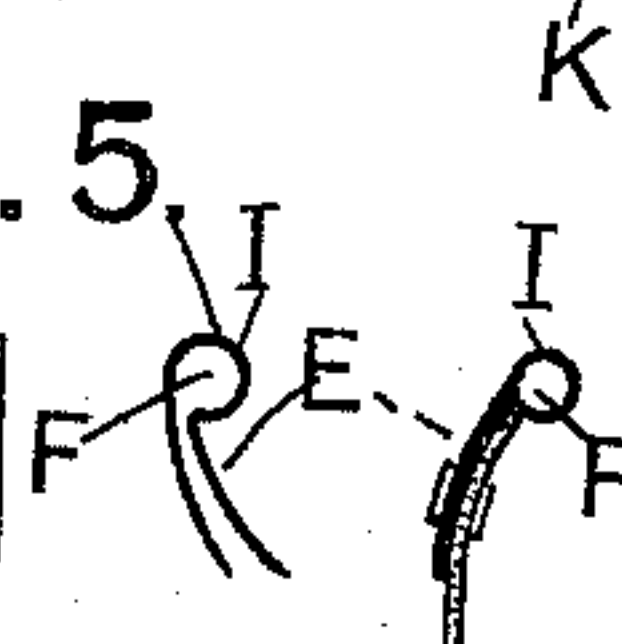


Fig. 5.

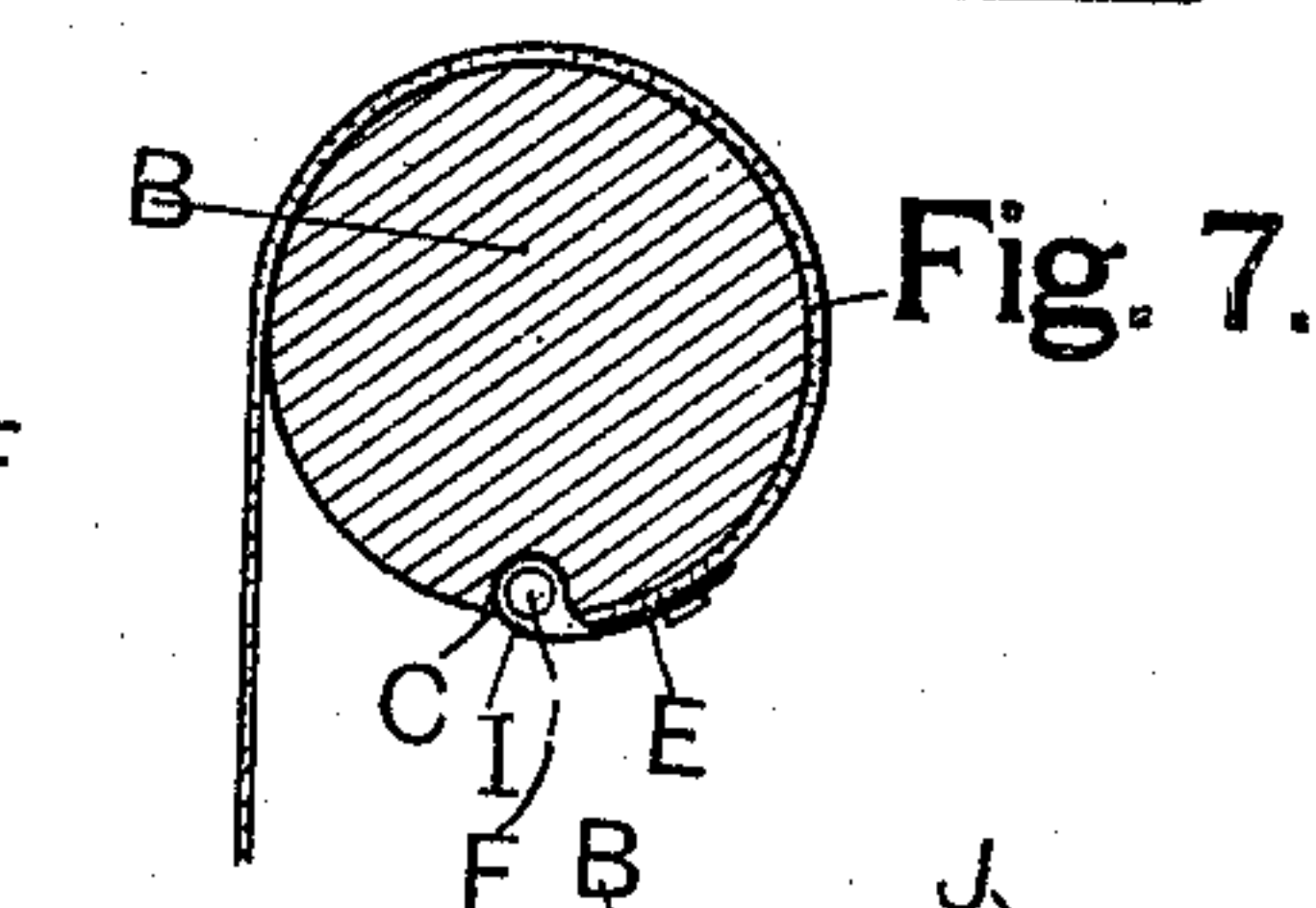


Fig. 6.

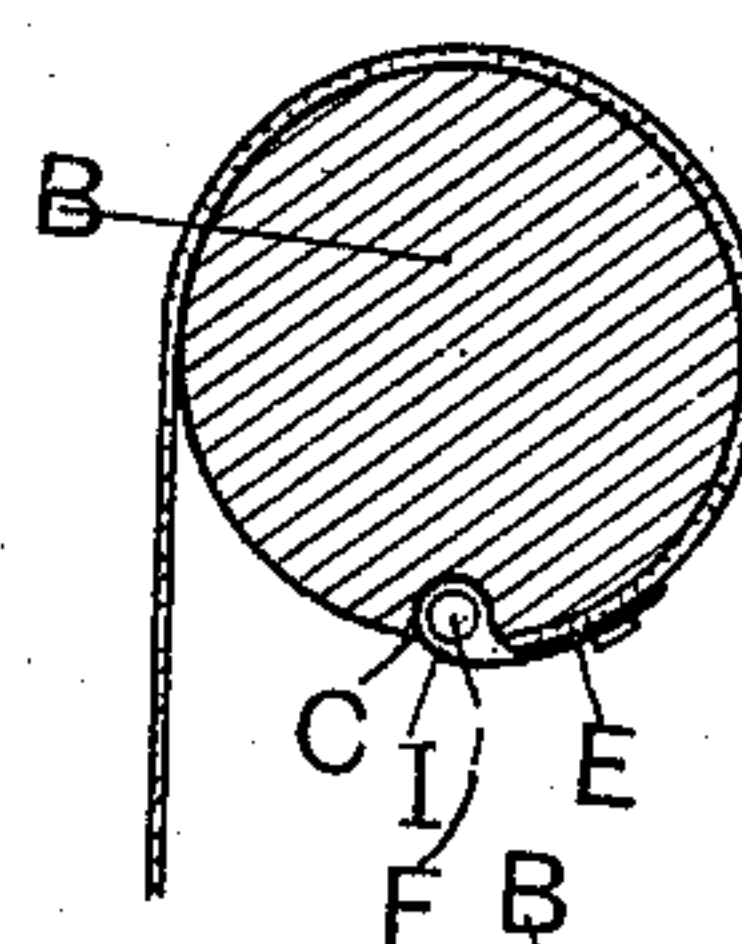


Fig. 7.

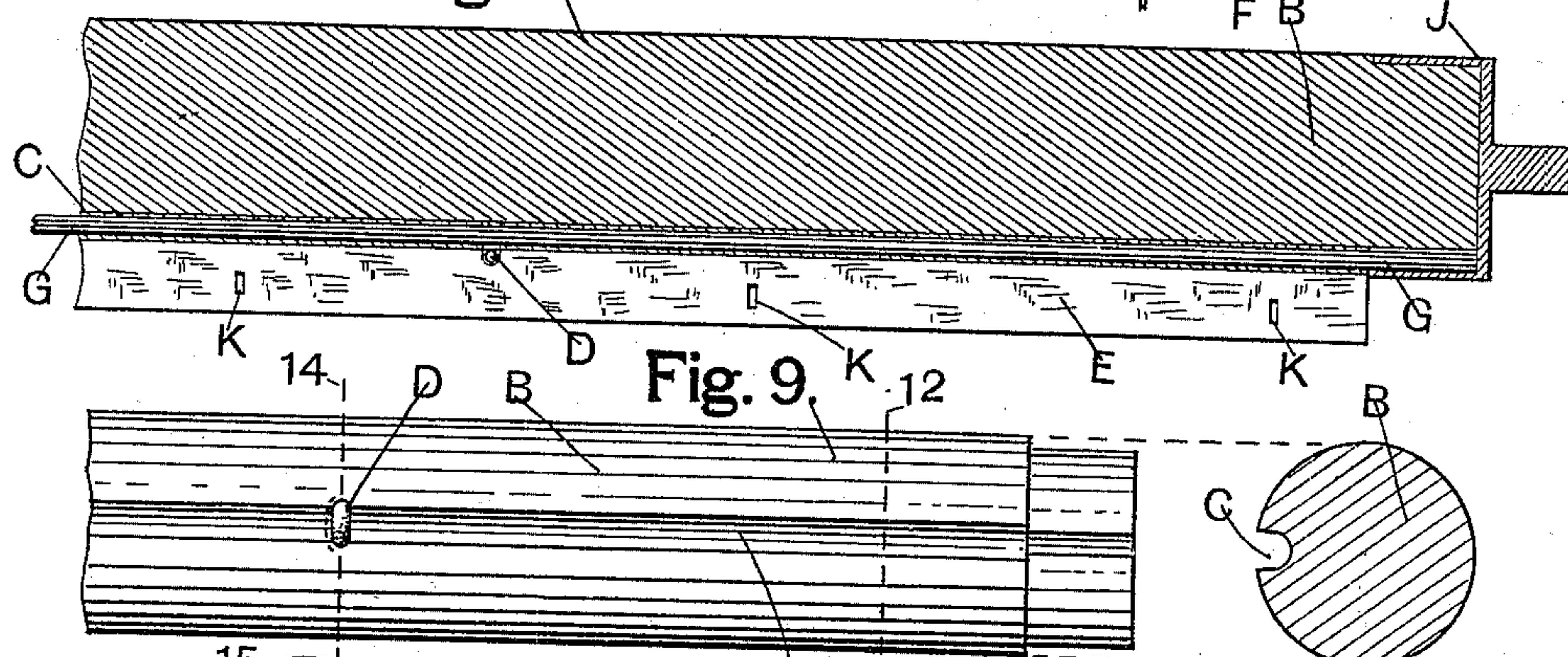


Fig. 8.



Fig. 9.



Fig. 10.

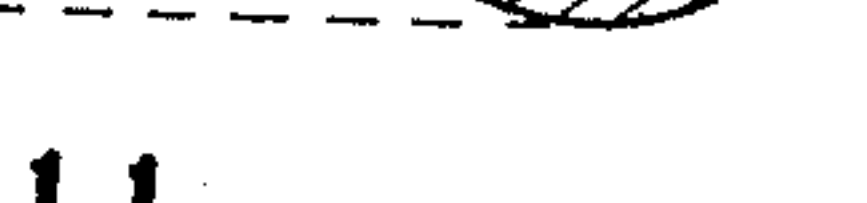
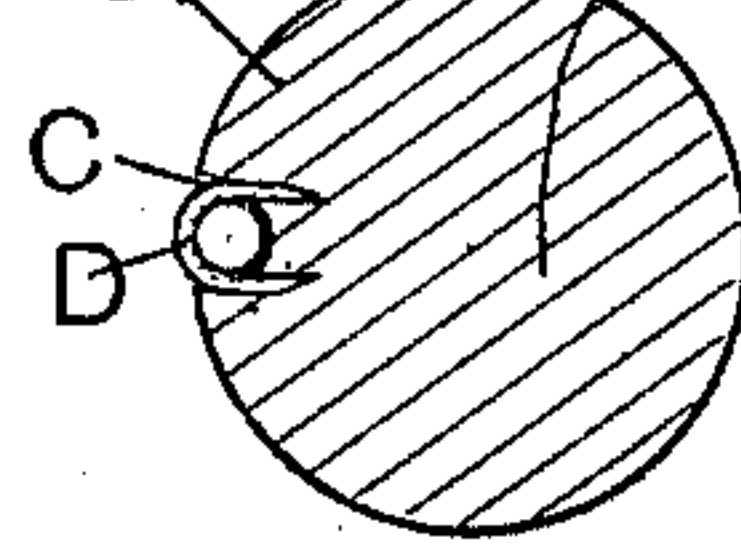


Fig. 11.

WITNESSES:

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UNITED STATES PATENT OFFICE.

THOMAS A. FONTAINE, OF CHICAGO, ILLINOIS.

MEANS FOR ATTACHING WINDOW-SHADES TO ROLLERS.

SPECIFICATION forming part of Letters Patent No. 542,703, dated July 16, 1895.

Application filed April 22, 1895. Serial No. 546,741. (No model.)

To all whom it may concern:

Be it known that I, THOMAS A. FONTAINE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Means for Attaching Window-Shades to Rollers, of which the following is a specification.

My invention relates to means for attaching window-shades to the roller upon which they are wound and from which they are suspended when in position in a window; and my object is to provide a means for the purpose which is both simple and effective and which may be easily understood and put into practice by any one of ordinary skill, the same being described hereinafter, and is illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of the top portion of a window-shade, showing a roller attached thereto, as is embodied in my invention. Fig. 2 is an elevation of a portion of the top of a window-shade, same as is shown in Fig. 1, but with the roller removed. Fig. 3 is a front elevation of the principal part of my attachment, and Fig. 4 is a view of one end of the same part as shown in Fig. 3, but on a larger scale, and Fig. 5 is an end elevation of the same, while Fig. 6 is an end view of this part as it appears when secured to the top of the shade. Fig. 7 is a transverse section of the roller, showing position of the part shown in Figs. 3 and 6 when it is attached to the shade and to the roller, the shade being wound around a portion of the circumference of the roller. Fig. 8 is an axial section of one end portion of the roller and of the journaled ferrule at the end, together with a section through the pintle-bearing of the part to which the shade is attached, the long pivotal wire being shown in position in elevation. Fig. 9 shows, respectively, an elevation of an end portion of the roller, together with a transverse section of the same on broken line 12 13. Fig. 10 is a transverse section of the roller on broken line 14 15 to show one of the hinge-staples in position. Fig. 11 is an elevation of one form of fastener well adapted to be used in securing the shade to the part shown in Fig. 3.

Similar letters indicate like parts throughout the several views.

A is the shade and B the ordinary form of roller with journals at each end. The roller is provided with a shallow groove C at one side and longitudinally thereof, and at several different points are driven in ordinary wire staples D, which transversely straddle the groove, as shown in Figs. 9 and 10.

The strip E is preferably made of thin metal, but may be made of any strong textile fabric or of stout paper, and is bent upon itself to form a hole F throughout the entire length for the reception of a pintle-wire G, Figs. 6 and 8, there being notches H cut out to receive the staples D when the cylindrically-formed portion I, through which is the hole F, is in position, down into the longitudinal groove C of the roller. The longitudinal groove C extends to the extreme ends of the roller, the pintle-wire G extending under the ferrules J, as is shown in Fig. 8.

The strip E really forms one leaf of a hinge, while the roller forms the other, so that when the pintle-wire is in position it passes through the entire length of the hole F, and in case the strip E is in position, with the cylindrically-formed portion I in position down into groove C, the wire also passes under each of the staples D, and the ends of the wire being under the ferrules J the strip E is pivotally secured to the roller. The holes K pass through the strip E and are adapted to receive the ordinary paper-fasteners (shown in Fig. 11) for securing the shade thereto; but other means may be used for this purpose, as is obvious.

The cylindrically-formed portion I of the strip E has a position with its center entirely on one side of the strip and is bent to fit the curve of the surface of the roller, thus not forming a longitudinal elevation on the roller, when in place, of sufficient height to injure the shade by forming transverse hollows or ridges thereon.

I claim as my invention—

A means for attaching a window shade to the usual roller therefor, comprising a strip E to one side edge of which the shade is attached, the opposite edge of the strip having a fold upon itself which forms a longitudinal hollow cylindrical rib with transverse notches at intervals through the rib, a longitudinal groove at the surface of the roller into which

is fitted the longitudinal rib of the strip, staples straddling the groove of the roller and secured thereto, and adapted to fit into the notches of the strip and a pivotal rod disposed
5 longitudinally within the rib and under the heads of the staples which serves in combination with the staples and the strip for the purpose stated.

In testimony that I claim the foregoing I have hereunto set my hand, this 20th day of 10 April, 1895, in the presence of witnesses.

THOMAS A. FONTAINE.

Witnesses:

EDWARD PYNE,
JAS. H. O'BRIEN.