(No Model.)

C. W. CLARK.

SHADE PULL.

No. 293,311. Patented Feb. 12, 1884.

Fig. 1.

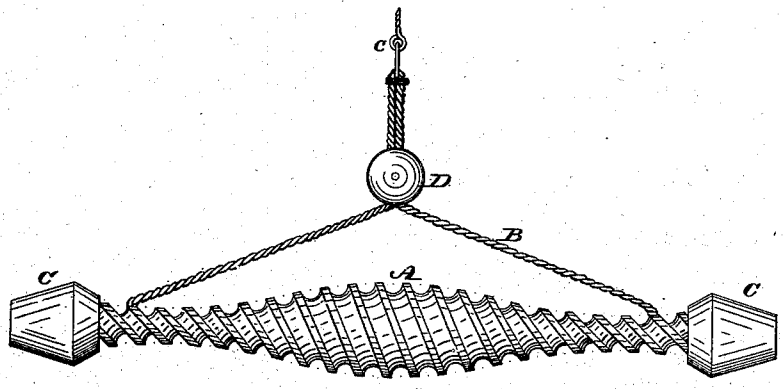


Fig. 2.

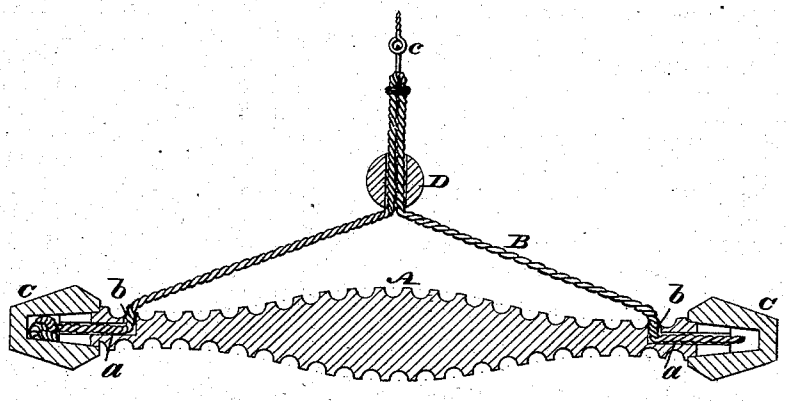


Fig. 3.

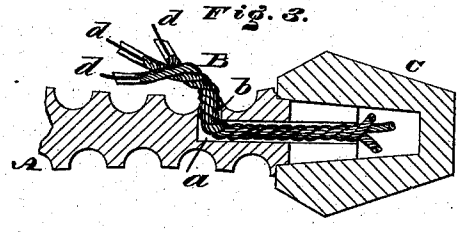
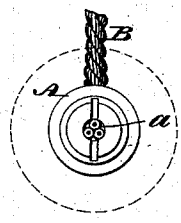


Fig. 4.



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UNITED STATES PATENT OFFICE.

CHARLES W. CLARK, OF PHILADELPHIA, PENNSYLVANIA.

SHADE-PULL.

SPECIFICATION forming part of Letters Patent No. 293,311, dated February 12, 1884.

Application filed November 15, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. CLARK, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Shade-Pulls, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a side elevation of a shade-pull embodying my invention. Fig. 2 is a longitudinal section thereof. Fig. 3 is an enlarged view, in section, of a portion of a modification thereof. Fig. 4 is an end view of Fig. 3, the ball being removed.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a shade-pull having the suspension-hook connected with the bar by being passed through said bar and fastened therein.

It also consists of means for stiffening the suspension-loop.

Referring to the drawings, A represents the bar of a shade-pull, and B the suspension-cord, and C the end caps or balls thereof. The ends of the bar are pierced or tubular, as at *a*, the bore or opening leading to the upper side of the bar, as at *b*, and into said openings are inserted the ends of the cord B, it being noticed that said cord is looped and has attached to its center or top bend a hook, eye, or other means of connection, as at *c*, of the pull with the shade or other article with which it is employed. The tubular ends of the bar are split or divided and somewhat tapering, and receive within them the ends of the cord B, it now being seen that when the balls are fitted on said tubular ends of the bar they contract and compress the same, and thus firmly clamp the ends of the cords in position within the ends of the bar, whereby the cord and bar are connected in a secure, reliable, and inexpensive manner, the strain heretofore created on the covering material by attaching the cord thereto being avoided. The security of the hold of the ends of the cord may be increased by making small knots at said ends, one of which is shown on the left side of Fig. 2, the knots or unknotted ends, as the case may be, being concealed by the balls.

In order to prevent swinging around or turning of the pull, I stiffen the cord B by wire *d*, (see Fig. 3,) and employ a slide, D, which is forced down over the cord below the top bend or angle, so as to double the cord, the diverging cord below the slide being drawn tightly by said slide, so as to render the diverging portions comparatively rigid and prevent them, and consequently the pull, from turning around after being adjusted on the shade.

If desired, the bar may be tubular throughout.

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

1. A shade-pull having a bar, end balls, and a suspension-cord, the latter having its ends fitted in the bar and secured by the balls, substantially as and for the purpose set forth.

2. In a shade-pull, a bar having its ends tubular and compressible, a suspension-cord having its ends fitted in the ends of the bar, and balls which are fitted on the ends of the bar and clamp the same on the cord, combined and operating substantially as and for the purpose set forth.

3. A shade-pull having a bar, a suspension-cord, and slide, said cord being stiffened and said slide tightening the stiffened cord, substantially as and for the purpose set forth.

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Witnesses:
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