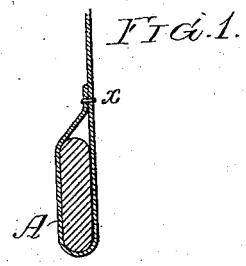
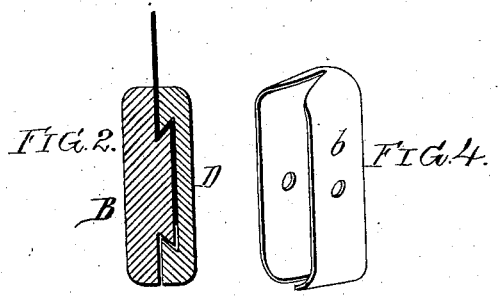
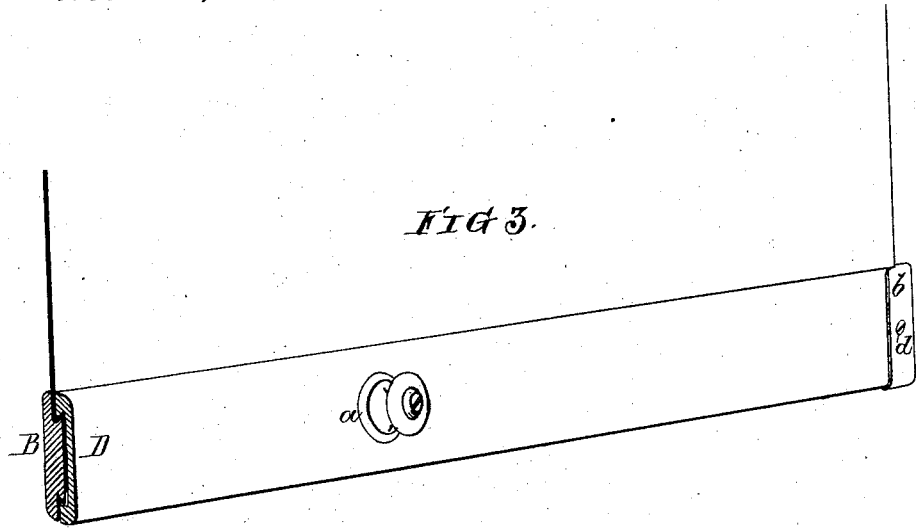


A. W. LANE.
Window-Shade.

No. 203,468.

Patented May 7, 1878.



Witnesses,
Thomas McIlvaine
Henry Smith

Inventor
Atlee W. Lane
by his Attorneys
Houston and Son

UNITED STATES PATENT OFFICE.

ATLEE W. LANE, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN WINDOW-SHADES.

Specification forming part of Letters Patent No. **203,468**, dated May 7, 1878; application filed February 11, 1878.

To all whom it may concern:

Be it known that I, ATLEE W. LANE, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Window-Shades, of which the following is a specification:

The object of my invention is to so construct a stiffening-strip for the lower end of a window-shade, and to so combine it with said shade that the latter will be strengthened and the accidental tearing of the same prevented. This object I attain in the following manner, reference being had to the accompanying drawing, in which—

Figure 1 is a sectional view of the lower end of a window-shade, showing the ordinary method of securing the stiffening-strip thereto; and Figs. 2, 3, and 4, views illustrating my improvement.

The ordinary method of securing a stiffening-strip to the lower end of a window-shade, as shown in Fig. 1, consists in forming a loop at the bottom of the shade by turning up the lower end and stitching it to the body at *x*, the strip A being slipped longitudinally into the loop thus formed. The objection to this plan is that the stitches weaken the brittle cloth of which shades are generally composed, and render the latter liable to tear on the line of stitches when any unequal strain is exerted upon the strip A. To overcome this objection I use two strips, B and D, and secure the lower end of the shade between these strips, which are held together in the center by means of the screw by which the knob *a* is held, while

the ends are secured by caps *b*, preferably of metal, which embrace said ends and are held in position thereon by means of screws *d*, these caps serving also as an ornamental finish for the ends of the strips.

The strip B has a dovetailed projection, and the strip D a dovetailed groove, so that when the strips are adapted to each other and to the shade, as shown in Figs. 2 and 4, it is impossible to withdraw the shade vertically.

By the above-described means of constructing and securing the stiffening-strip the lower end of the shade is strengthened, and the objection to the usual method of fastening entirely overcome, while, owing to the fact that the weight is evenly distributed on both sides of the shade, the latter must hang perfectly straight. By the use of the strips B and D, facilities are also afforded for the ready and secure attachment of the fringe to the bottom of the shade.

I claim as my invention—

The combination of the shade and the strips B and D with the caps *b*, adapted to the ends of the strips, substantially as described, and held in position thereon by means of transverse screws *d*, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ATLEE W. LANE.

Witnesses:

HARRY A. CRAWFORD,
HARRY SMITH.