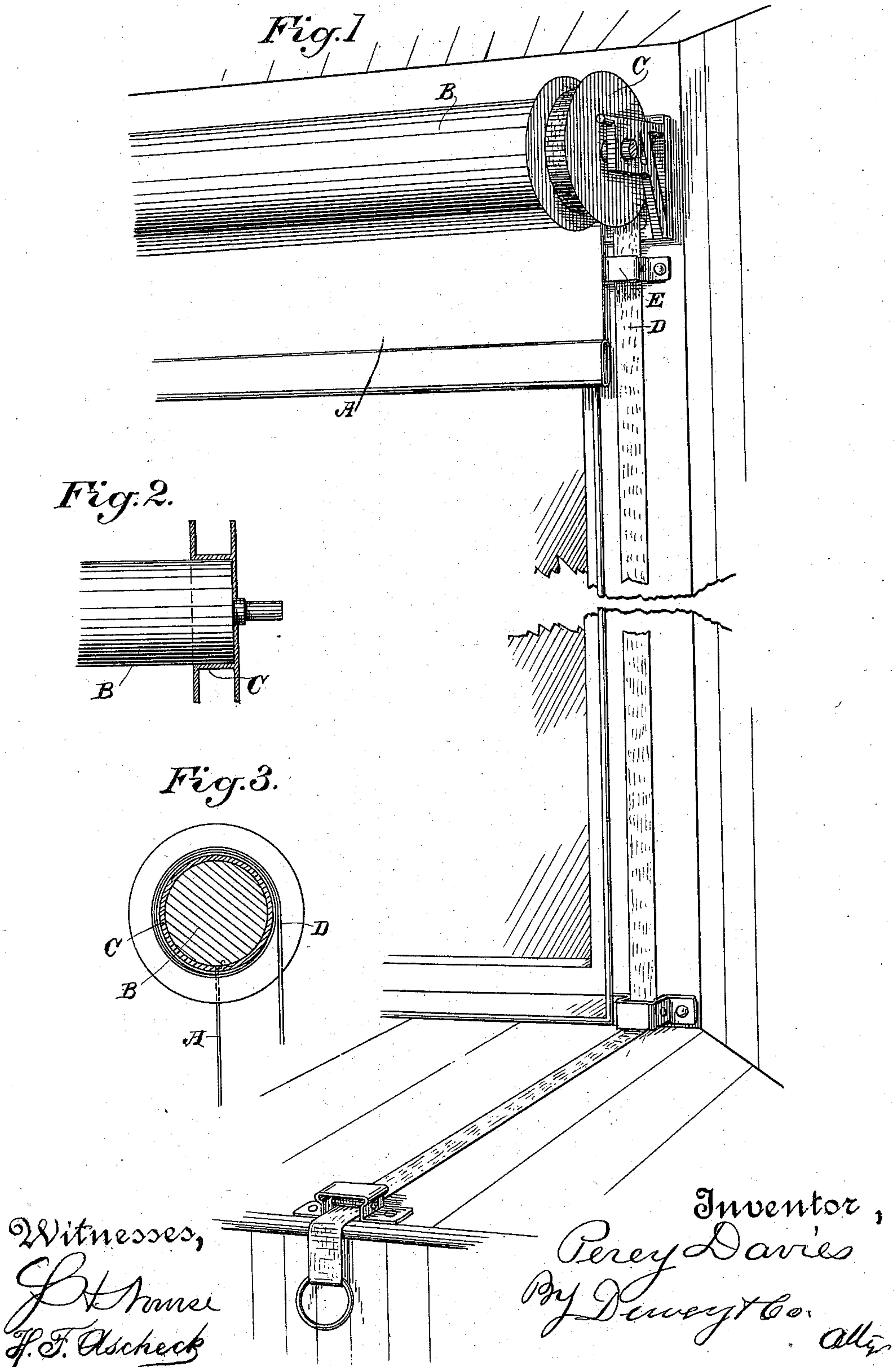


(No Model.)

P. DAVIES.
WINDOW SHADE ATTACHMENT.

No. 559,098.

Patented Apr. 28, 1896.



UNITED STATES PATENT OFFICE.

PERCY DAVIES, OF OAKLAND, CALIFORNIA, ASSIGNOR OF ONE-HALF TO
SOL KAHN, OF SAME PLACE.

WINDOW-SHADE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 559,098, dated April 28, 1896.

Application filed February 17, 1896. Serial No. 579,514. (No model.)

To all whom it may concern:

Be it known that I, PERCY DAVIES, a citizen of the United States, residing at Oakland, county of Alameda, State of California, have
5 invented an Improvement in Window-Shade Attachments; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to an attachment for
10 that class of window-shades which are actuated by a spring in the roller by which the shade is rolled up.

It consists of a supplemental drum fixed to the end of the shade-roller adapted to receive
15 a band or cord which winds and unwinds upon it simultaneously, and in the same direction with the shade, and in conjunction therewith of guides by which it may be operated from any point distant from the window.

Referring to the accompanying drawings,
20 Figure 1 is a view of my device. Fig. 2 shows one end of the curtain-roller with the drum in section. Fig. 3 is a section at right angles to the one of Fig. 2, showing the shade entirely unwound.

In the operation of that class of shades in which the shade is rolled up on its roller by means of a spring within the roller, and is retained at any point by a pawl-and-ratchet
30 mechanism which may be released by a sudden movement of the shade, it is necessary to operate such shades by a cord centrally attached to the lower transverse bar of the shade. This is objectionable where such
35 shades are applied to large show-windows, as the cord interferes with the appearance of the window, and is also difficult to reach when goods are displayed in the space behind the window. It is also difficult to disengage the
40 pawl-and-ratchet mechanism so as to allow the shade to rise when it has been pulled entirely down at the bottom, and if the shade is entirely uncoiled from its roller it can only
45 be again started by getting up and disengaging the pawl by hand.

In my invention I am enabled to start the shade from any point, and to operate it by a band or cord which is entirely out of line with the window and is detached from the
50 shade itself.

A is the shade, which is coiled and uncoiled

upon a roller B, journaled across the top of the window in the usual manner.

C is a drum which is adapted to receive a band or cord, and is fixed upon one end of
55 the shade-roller. This drum may be fixed in any suitable manner; but in order to utilize the shades which are already in place I have found a convenient method is to make the drum hollow, so as to slip over the end of the
60 roller, where it may be secured, thus rendering it unnecessary to remove the pin or shaft which is already fixed to the roller. The band D is coiled upon the drum with one or
65 more turns greater than the number of turns that the shade makes upon the roller, as shown in Fig. 3. This band may be led through guides E along the side of the window and thence outward along the floor of the
70 case or window-seat, where it is employed in large show-windows having a deep space behind them, or it may be carried along over similar guides or pulleys along the ceiling and thence down the inner side of the deep
75 show-window case. By the use of this band the operator is enabled to pull the curtain down from any distant point without taking hold of the curtain itself or without any necessity of a cord attached to the center of the
80 curtain.

The curtain can be left at any point, being held by the usual pawl-and-ratchet mechanism, and if it is again to be raised the pawl can be disengaged by pulling the curtain down a little and then suddenly slacking it and allowing
85 it to be run up by the action of its spring.

An important advantage is obtained by reason of the band or cord having more turns upon the pulley than the curtain, because if a curtain of this class is pulled down so far
90 that it strikes the bottom or so that it is entirely uncoiled from the roller it will be impossible to give it the further movement necessary to disengage the pawl and allow it to again run up. In this case it is necessary to
95 get a step-ladder and disengage the ratchet by hand.

In my device, by reason of the band having more turns than the curtain, the roller can be given the turn necessary to disengage
100 the pawl, and the curtain then allowed to run up in the usual manner.

The device can be attached to any shade now in use and is cheap and efficient.

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

1. The combination with a spring-actuated roller and window-shade of a supplemental drum fixed to one end of the roller, a band or cord coiling upon said drum in the same direction with the shade, and guiding-pulleys through which it is led to points within reach of the operator.

2. The combination with a spring-actuated roller and window-shade attached thereto of

a drum fixed upon the end of a roller, a band or cord coiled upon said drum in the same direction that the shade coils upon the roller and having a greater number of turns than the shade whereby the shade may be started to roll up when entirely uncoiled from its roller.

In witness whereof I have hereunto set my hand.

PERCY DAVIES.

Witnesses:

S. H. NOURSE,
JESSIE C. BRODIE.