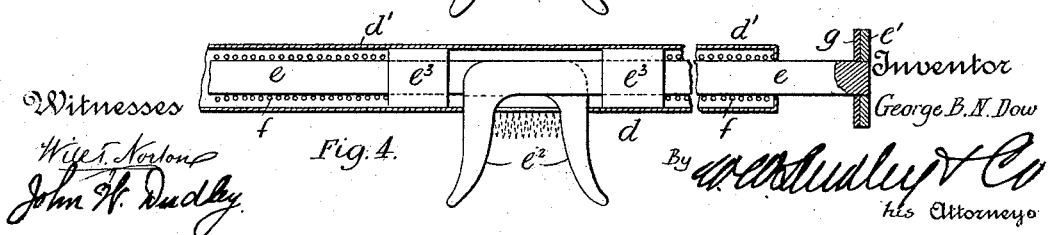
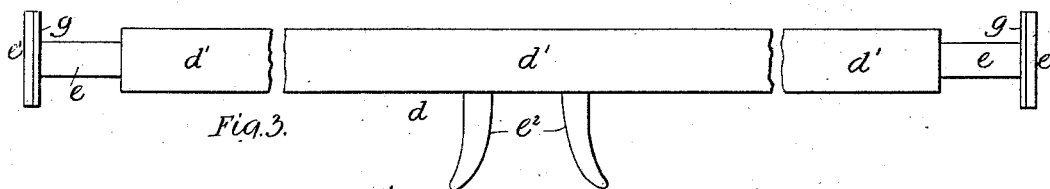
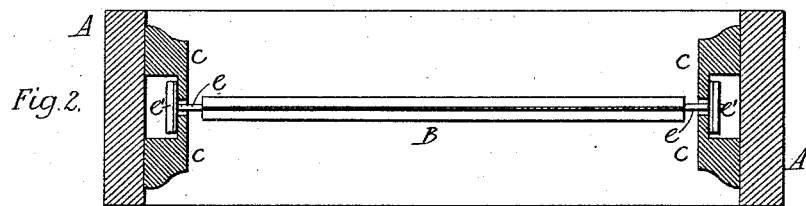
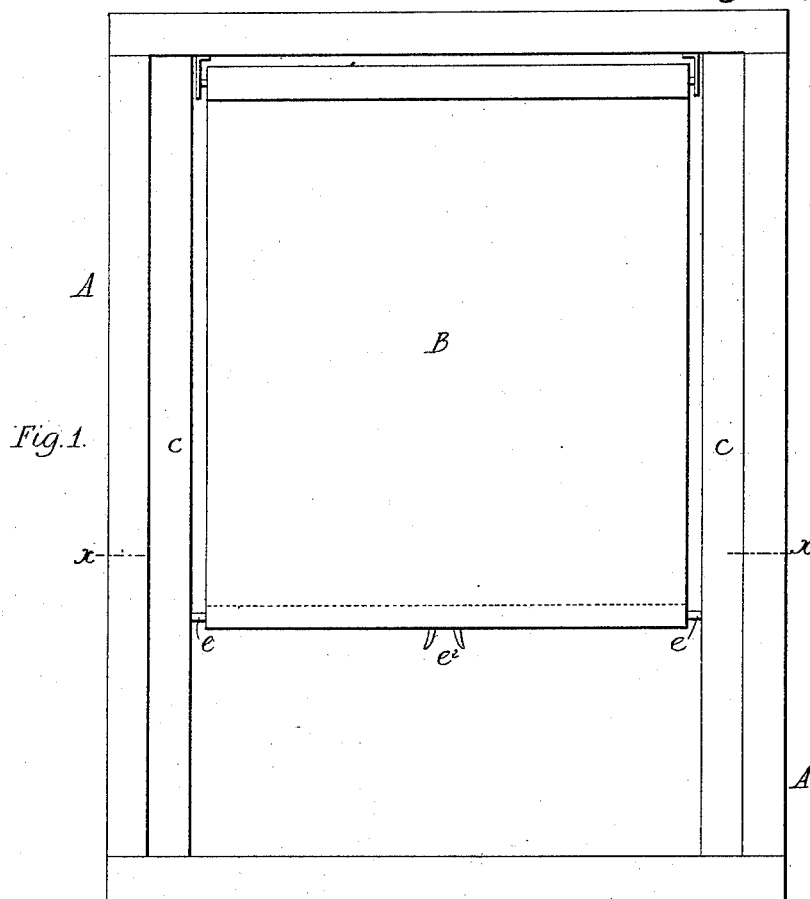


(No Model.)

G. B. N. DOW.
ATTACHMENT FOR WINDOW SHADES.

No. 524,583.

Patented Aug. 14, 1894.



UNITED STATES PATENT OFFICE.

GEORGE B. N. DOW, OF MANCHESTER, NEW HAMPSHIRE, ASSIGNOR OF THREE-FOURTHS TO CARL E. YORK, HENRY B. FAIRBANKS, AND GEORGE W. PRESCOTT, OF SAME PLACE.

ATTACHMENT FOR WINDOW-SHADES.

SPECIFICATION forming part of Letters Patent No. 524,583, dated August 14, 1894.

Application filed November 28, 1893. Serial No. 492,251. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. N. DOW, a citizen of the United States, residing at Manchester, in the county of Hillsborough and State of New Hampshire, have invented certain new and useful Improvements in Attachments for Window-Shades; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to maintaining and releasing devices applicable to spring actuated roller shades, and more especially to devices of that type in which are employed longitudinally movable spring actuated rods having at their outer ends frictional holding devices, adapted to engage grooves in the side of the casing, and at their inner ends pendants adapted to be moved by hand against the action of the springs to release the shade and permit of its being raised or lowered. In existing types of such devices, so far as I am aware the rods and frictional tips have been moved outward by the force of the springs against the sides of the window casing to hold the shade in position, and are moved inward in order to release the shade and permit of its movement. This outward pressure of the rods not only results in wear on the casing which after a time would necessitate considerable expense in its being replaced, but allows too much longitudinal movement to the lower end of the shade which permits of the same being tilted or moved out of a horizontal position. Such a tendency detracts from the usefulness and durability of the device, and to overcome the same is the result of this invention.

My invention may be said to consist in providing a holding and releasing device for spring roller shades, in which the rods are moved inward by the action of springs, and the friction holding devices engage the inner side of a slotted window band, the latter being also of new and novel construction.

My invention also consists in the construc-

tion, relative arrangement and operation of the several parts constituting my improved holding and releasing device, all of which will hereinafter fully and clearly appear from a reading of the following description taken in connection with the accompanying drawings which form a part of this specification, and in which—

Figure 1 is an elevation of a car window casing with a spring actuated shade having at its lower end my improved device. Fig. 2, is a horizontal sectional view taken on line $x-x$ of Fig. 1. Fig. 3 is an elevation of my improved device detached, and Fig. 4 is a vertical, longitudinal, central section of the same.

Referring to the said drawings by letter, A denotes the window casing, and B is the shade which, as before stated, is of the spring roller type. Secured to the casing at each side are two bands $c c$ of wood or other suitable material which are rabbeted on their inner sides, and in practice are separated slightly in order to form a T-shaped or V-shaped slot to receive the friction devices presently to be described, this groove being of sufficient size to permit of the free movement thereof. The bands are secured to the casing by screws or the like, and are easily replaced when worn or broken without disturbing any other part, or causing injury to the casing. These bands in practice receive all the wear, inasmuch as the frictional contact of the devices employed is made with the inner side of said bands, and not on the casing as is the case with existing devices.

The holding and releasing attachment is shown at d and consists of a hollow tube or casing d' , around which the lower end of the shade is secured. $e e$ are the actuating rods which are movable within the casing, with their outer ends projecting beyond the ends of the casing and into the slots in the bands, and terminating in disks e' which latter are of sufficient size to merely fill the wide portion of the slot as shown. The inner ends of the rods are lapped, and terminate in pendants e^2 which in practice are seized by the thumb and finger of the operator and moved to release the friction devices. Adjacent to the inner end of each rod is an enlarged portion e^3 which forms a shoulder between which

and the end of the casing a spring *f* is confined. This spring is coiled around the rod and the tension operates to move said rod inward, in order to produce the necessary friction on the window bands. Or if desired a spring may be interposed between the pendants as shown in dotted lines. The disks *e'* are preferably removably secured to the outer ends of the rods in order to permit of the attachment of rubber, fiber or other washers *g* on the inner side thereof, and which in practice engage the inner side of the groove, and produce through the action of the springs the friction necessary to hold the shade at any desired height against the action of the spring roller. By reason of the engagement of the washers with the inner side of the bands, instead of with the casing, as heretofore, the washers constitute in themselves a guide which insures their simultaneous movement and precludes a tilting of the lower end of the shade, inasmuch as a very slight outward movement of the rods will be necessary to free the washers or to reduce the friction sufficiently to permit the movement of the shade. The operation of my invention will be understood at a glance by any one versed in the state of the art. The springs operate to force the rods inward and to cause a binding action between the washers, and the inner side of the window bands; and the inner ends of the rods being lapped, by moving the pendants toward each other the friction is reduced sufficiently to permit of a vertical movement of the shade. Aside from the advantages resulting from the engagement of the washers with the bands, the construction of the rods and the manipulating devices therefor render the operation very simple and effective. The inner ends of

the rods being lapped each acts as a bearing surface for the other inasmuch as the inner sides of the said ends are in constant contact, and when moved outwardly to release the shade the relative positions of said ends to each other are maintained thus preventing any lateral movement of the pendants. The lapped condition of the ends also permits of the pendants being moved for the purpose of releasing the shade by the thumb and finger of one hand, and inasmuch as only a slight movement is required for the disengagement, the operation is effected comparatively without labor or loss of time.

My invention is very simple in construction and operation, is durable, and has the advantages as before stated of preventing wear on the permanent parts of a window, and of preventing the tilting of the lower end of the shade.

I claim as my invention—

An attachment for holding and releasing spring actuated window shades, comprising in combination, the window bands having the slots as described, the tube or cylinder, the rods having their inner ends lapped and terminating in pendants projecting through the casing, and at their outer ends removable disks and washers movable in the slots and adapted to engage the inner side of the bands, and springs operating in connection with the rods to move the latter inward, all substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE B. N. DOW.

Witnesses:

GEO. W. PRESCOTT,
H. B. FAIRBANKS.