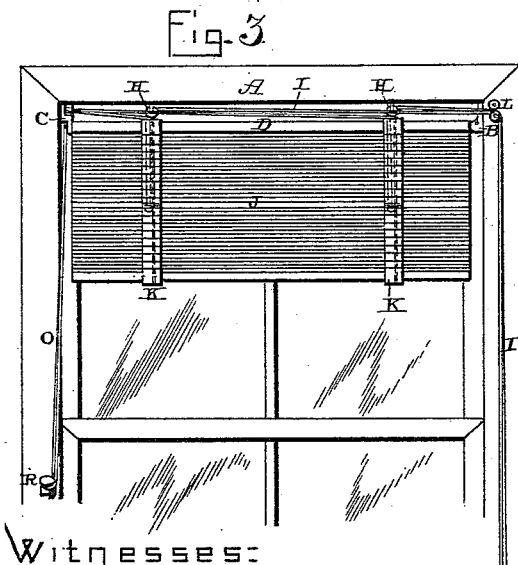
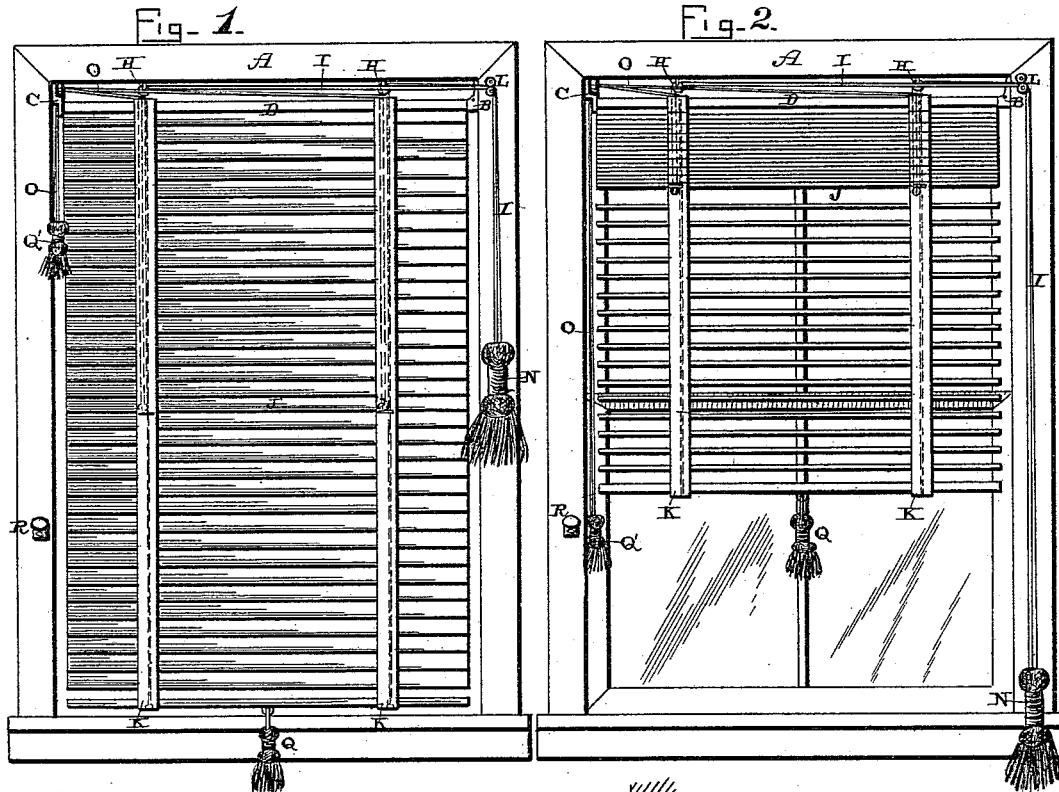


(No Model.)

J. A. BALDWIN.
VENETIAN BLIND.

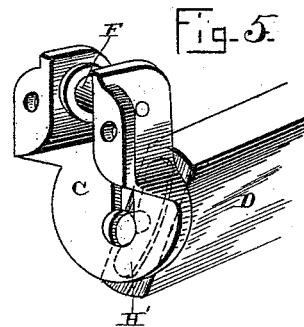
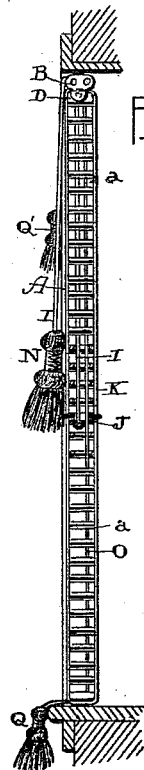
No. 420,000.

Patented Jan. 21, 1890.



Witnesses:

E. P. Ellis,
Allen Pattison



Inventor:
J. A. Baldwin,
per
F. A. Schmann,
att'y

UNITED STATES PATENT OFFICE.

JUDSON A. BALDWIN, OF WINOOSKI, VERMONT, ASSIGNOR TO BALDWIN & CHENEY, OF SAME PLACE.

VENETIAN BLIND.

SPECIFICATION forming part of Letters Patent No. 420,000, dated January 21, 1890.

Application filed September 25, 1889. Serial No. 325,093. (No model.)

To all whom it may concern:

Be it known that I, JUDSON A. BALDWIN, of Winooski, in the county of Chittenden and State of Vermont, have invented certain new and useful Improvements in Venetian Blinds; and I do hereby 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in inside blinds; and it consists in the combination and arrangement of parts more fully described hereinafter, and particularly pointed out in the claims.

Figure 1 is a front elevation of a blind embodying my invention, and showing the slats lowered. Fig. 2 is a similar view, showing the upper section of the slats gathered at the top. Fig. 3 is a front view of the blind, showing the slats all gathered at the top. Fig. 4 is an edge view, partly in section. Fig. 5 is a detail view.

A represents a suitable frame, which is to be attached to the inside of the window-frame when the window-frame is too shallow to allow the blind to be placed inside of it. Where the window-frame is sufficiently deep to allow the blind to be placed inside of it, this frame A is not necessary. Secured to either the inner side of the window-frame or the inner side of the frame A when it is used are the castings B C, in which the upper one D of the slats is journaled. The casting B forms, simply, a bearing for the journal upon the end of the top slat, and through which is passed a small stop-pin to prevent that end of the top slat from being forced or raised out of the casting when all or a portion of the slats are raised. The casting C has a pulley F journaled in its upper part and over which the lighter elevating-cord passes. Between the end of the top slat D and this casting C is placed a frictional spring H', (shown in dotted lines in Fig. 5,) which serves to keep the top slat tilted in any position into which it may be adjusted. If it were not for this

frictional spring, the top slat would not remain in an inclined or tilted position, and thus the slats could never be closed together at their edges so as to shut out the light. This spring is necessary where the slats are all to be adjusted by one in the series which is secured to the ladder-tapes at each end, as hereinafter described.

Secured to the under side of the top of the frame A are two guiding-pulleys H, over which the heavier elevating-cord I passes. The two ends of the cord or cords, after passing over these pulleys, pass down through the usual slots in the slats, and are fastened to a central slat J, which is fastened at both of its edges at or near each end to the ladder-tapes K, between which all of the slats are placed, and supported by means of the ordinary cross-strips a, which have their ends connected to the tapes. This one slat being fastened to the ladder-tapes at both ends, it is only necessary to catch hold of this one slat to tilt or turn all of the other slats in any desired direction, including the top one D, to which the upper ends of the tapes are fastened in the usual manner, and which are held in their adjusted position by means of the springs H'. By thus fastening this central slat to the tapes two important advantages are gained: First, this slat serves as a support or a handle to tilt or operate all of the other slats in either opening or closing them, and, second, it serves to divide the whole series of slats into upper and lower sections.

The heavier operating-cord passes through the slots in the slats just far enough to be fastened to this one central slat at its inner end, and has attached to its opposite end a counter-weight, as hereinafter described. All of the slats below this one rigid slat hang open, and while they are raised with the upper section of slats, as shown in Fig. 2, they are not operated by the heavier operating-cord in any other manner. The heavier cord serves to close together the upper section of slats and to simply raise the lower section, leaving them in any position into which they have been adjusted. This heavier operating-cord passes between two guiding-rollers L, and then has a counter-weight N attached to

its lower end sufficiently heavy to counterbalance the entire blind, and thus hold it in any desired position. This counter-weight is given any suitable finish, so as to resemble a tassel or other similar device, and thus add to the beauty and the finish of the blind, or it may be run in a box on the side of the window-frame; but then it will be necessary to catch hold of the cord itself instead of the counter-weight in operating it. This counter-weight, being made heavy enough to balance the entire blind, does away with all necessity for exerting a heavy pull upon the blind when the slats are all to be gathered together at the top, as shown in Fig. 3.

A counter-weight which will support the blind in any position makes it necessary for a person to merely raise the weight of the lower section of blinds, when they will all be gathered together at the top of the window, as hereinafter described. One-half of the weight of the slats being taken from the elevating-cord, the cords will wear at least twice as long as when the entire weight of the slats is brought to bear upon a single cord alone.

Passing over the pulley F in the casting C is the lighter operating-cord O, which serves to operate the lower section of the slats alone, or to close both the upper and lower sections, in the manner hereinafter described. The two ends of this cord pass down through the slots in the top slat D and through all of the other slats and is fastened to the lower one P of all the slats, which is either weighted or has a weight Q, attached to it, so as to counterbalance the weight Q', attached to the string O, and which is finished so as to look like a tassel. The counterbalance-weight N being of substantially the same weight as the entire blind, as heretofore described, it will be seen that a slight pull upon the light end O will lighten the weight of the blind, and immediately the counter-weight N falls and automatically closes the upper slats to any desired extent, leaving the lower section of slats open, as shown in Fig. 2. Should it be desired to close the entire blind, a continuous pull upon the light cord O will allow the weight N to automatically close the upper section, as above described, and then the lower section, to which said cord is attached. The blind is designed to be operated entirely by the lighter cord, as just described; but where the weight N is not inclosed, but is outside, as here shown, the upper section may be closed by a slight pull upon the said weight, if most convenient to the operator; but by means of the construction here shown and described the entire

blind can be operated by the lighter cord, in which event the upper section is closed automatically by the weight N.

Where a single operating-cord has been used heretofore and it was desired to raise the lower slats of the blind a suitable distance, these slats have closed together and formed a heavy mass of wood just across the window, and thus causing the blind to present a very unsightly appearance and to obstruct the view from the window. By the use of two separate cords, as here shown, this defect is entirely remedied and no heavy mass of wood is ever formed across the window, except at the top, where it may be hidden from view by a cornice, lambrequin, or other device.

Having thus described my invention, I claim—

1. The combination, with a Venetian blind, of an elevating-cord attached at one end to a slat which is at or near the center of the blind, a counter-weight attached thereto at its opposite end, whereby the blind is formed into two sections, and the guides over which the cord passes, the weight thus closing the upper section automatically when the lower section is slightly raised, substantially as shown.

2. The combination, with a Venetian blind, of an elevating-cord attached at one end to a slat which is at or near the center of the blind, a counter-weight attached thereto at its opposite end, whereby the blind is formed into two sections, a cord which is attached at one end to the lower section for raising it, and the guides over which the cords pass, the weight thus automatically closing the upper section when the lower section is raised by the cord attached thereto, substantially as described.

3. In a Venetian blind, the combination of the slats, the casting in which the top slat or piece is journaled, the ladder-tapes to which one of the slats is fastened at each of its ends and which divides the slats into two sections, an elevating-cord attached to the lower portion of the upper section for gathering the top section of slats, guiding-pulleys over which it passes, and a counter-weight connected to the opposite end of said cord, with a second cord, which is attached to and gathers the lower section of slats, and the operating-pulley over which it passes, substantially as specified.

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

J. A. BALDWIN.

Witnesses:

B. F. VAN VLIET,

E. P. ELLIS.