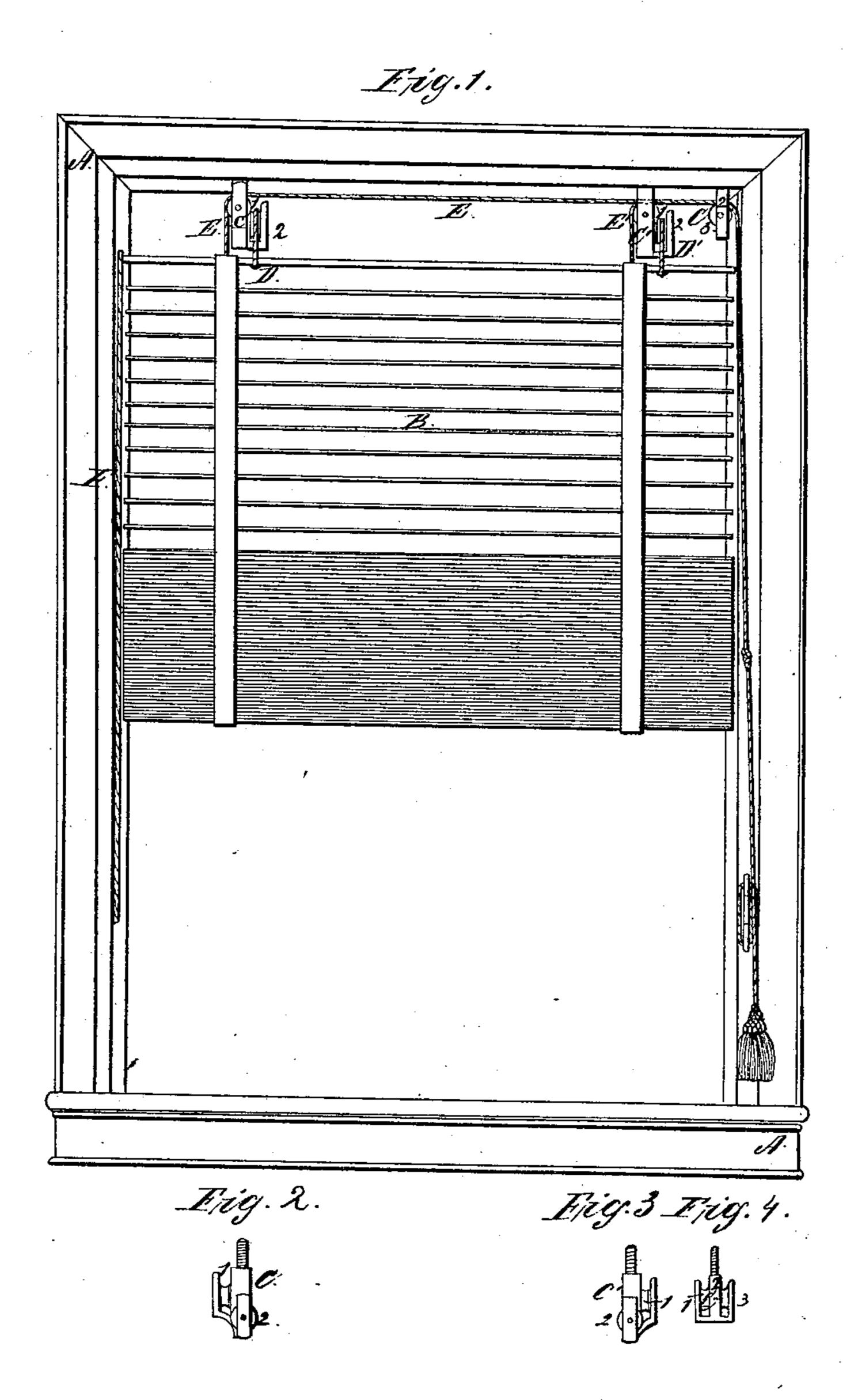
MSafford, Inside Blinds.

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Faterited June 30, 1863.



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UNITED STATES PATENT OFFICE.

HENRY W. SAFFORD, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN HANGING VENETIAN BLINDS.

Specification forming part of Letters Patent No. 39,069, dated June 30, 1863.

To all whom it may concern-

Be it known that I, HENRY W. SAFFORD, of the city of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in the Mode of Hanging Venetian Blinds; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a front view of a Venetian blind hung in a window-frame in my improved mode, and Figs. 2, 3, and 4, side views of the pulley-blocks seen in Fig. 1—like letters indicating the same parts when in the different

figures.

window-blinds have heretofore been hung upon pulley-wheels working in slots cut in a supporting-board screwed fast to the head of the window-frame, and, consequently, whenever it is desired that the blinds be taken down for the purpose of cleaning, or for other reasons, it is absolutely necessary either to unscrew the said supporting board or to separate both the suspending and the hoisting cords from the blinds, both of which are troublesome operations, especially to females, and the subsequent replacement of the same is still more troublesome and difficult.

To obviate these difficulties is the object of my invention. It consists, substantially as hereinafter described and specified, in the employment of open pulley-blocks screwed either into the top of the window-frame or into a supporting-board secured to the same in the usual manner, so that both the suspending and the hoisting cords may readily be either lifted out of or replaced in the said pulley-blocks, as occasion may require, without detaching them from the blinds, or with-

out removing the supporting-board.

In the drawings, A A is the window-frame, B the Venetian blind hung therein, C C' C² the open pulley-blocks, D D' the suspendingcords, E E' the hoisting-cords, and F the shading-cord. The usual ornamental face or cornice-board is left out of the drawings, in order to show the pulley-blocks and cords applied. Each of the blocks C C' has two wheels 1 2, the higher ones, 1, carrying the hoisting-cords E E', and the lower ones, 2, the suspending-cords D D', the said pulleys

being placed with their planes at right angles to each other in each block, and the blocks left open above one side of each wheel, as represented in the drawings, or so that its appropriate cords may at any time be easily lifted into and out of the blocks. In the present instance, the blocks C C are made especially for the two respective positions in which they are seen in Fig. 1, in order to avoid any rubbing contact between the hoisting-cords E E' and their adjacent suspending-cords D D'; but, by making the said blocks so that the hoisting cord pulleys 11 shall be a little farther removed, horizontally, from the suspending-cord pulleys 2 2, the same form of block will answer for both positions. The block C² also has two pulleys, 3 3, and these are placed with their planes parallel to each other, and the block also left open on one side above each pulley, as seen in the drawings, or so that the hoisting-cords may at any time be easily lifted either into or out of the same. The upper end of each of the blocks C C' C2 is formed into a screw, having a square shoulder, as seen in Figs. 2, 3, and 4, that they may be readily screwed into the top of the window-frame, or into a supporting-board, and stopped at the proper position, as seen in Fig. 1.

In the operation of my invention, it will be evident to the observer that, if the blocks C C' C² be inserted to correspond with the blind, as seen in Fig. 1, the whole blind with all its cords may be easily either removed from or placed in position in the windowframe without withdrawing either of the blocks C, or removing the supporting-board, if one be used, and that, if it be desired at any time merely to let the whole blind down from the top of the window-frame, by means of the hoisting cords E E', it will only be necessary, first, to lift the two suspending-cords, D D' out of the pulley-blocks C C' to effect the desired result. It will also be evident that the head-brackets heretofore required may be dispensed with entirely, and the ornamental cornice or face-board then attached directly to the top of the window-frame or casing, thus saving the expense of the usual upper head-piece; that the usual single set of hoisting-cords are made to serve in raising and lowering the blind bodily, as well as for adjusting the height of its lower end, as occasich may at any time require, and that, consequently, my improvement reduces the original cost and renders the blind more easily applicable to and removable from the windows, and also less liable to get out of order.

I am aware that Venetian blinds, and also shades, have before been hung by means of extra or double sets of hoisting cords and pulleys, so that the blind or shade could be let down, bodily, from the top of the windowframe, as in Bohrer's patent of 1850, and in Rose's patent, and in Crook's patent of 1855; that fusees have been used in combination with a spring and a continuous cord, for the purpose of retaining the lower end of the blind or shade at any particular position, as in Bixler's patent of 1855; and, also, that an upper head with brackets has been used in connection with a lower head, provided with hooks and extra cords for the purpose of rendering the blind detachable without removing the holding nails or screws, as well as to al-

low the blind to be raised or lowered bodily, as in Rose's patent of 1855. I therefore do not desire to claim anything described in the said patents; but,

Having fully described my improvement in the mode of hanging Venetian blinds, what I claim as new therein of my invention, and desire to secure by Letters Patent, is—

The combined arrangement described of the open pulleys C C' C² with the suspending-cords D D' and the single set of hoisting-cords E E', the whole operating together, substantially in the manner described and for the purposes specified, whether the said pulleys be attached directly to the window-frame or to a separate supporting board attached thereto and forming part of the blind, as described.

HENRY W. SAFFORD.

Witnesses:

BENJ. MORISON, JAMES McCahen.