(No Model.)

# S. M. FISHER.

## SHUTTER WORKER.

No. 476,044. Patented May 31, 1892.

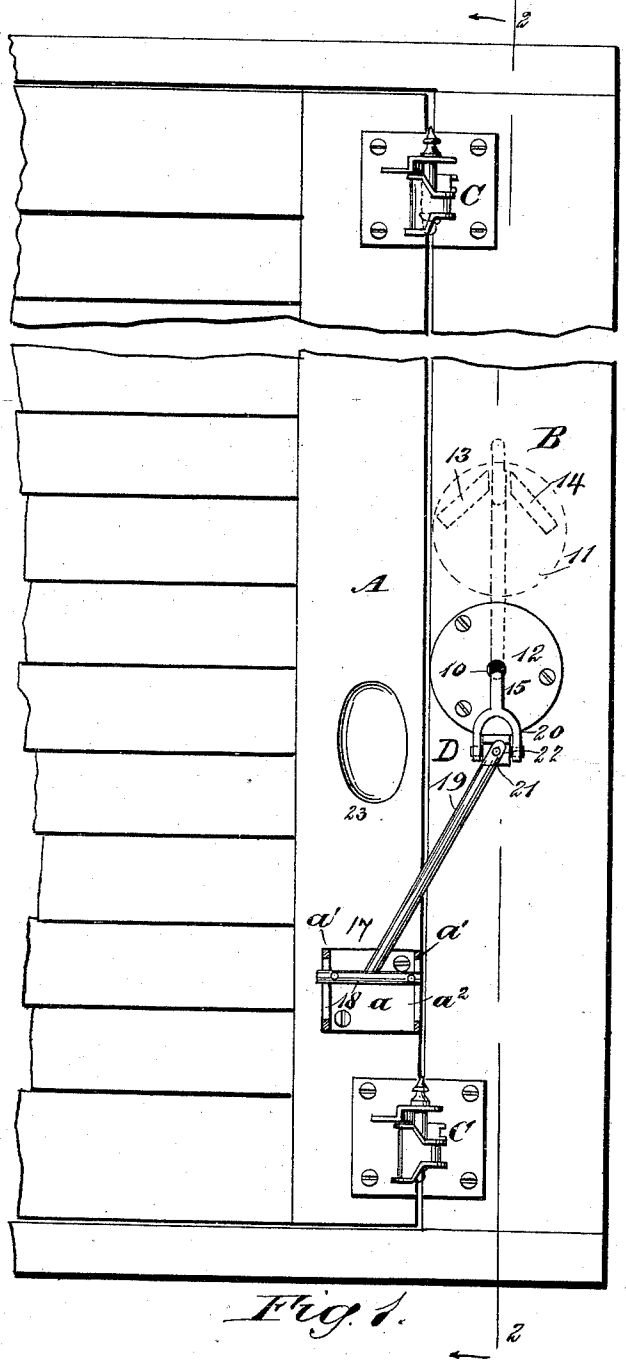


Fig. 1.

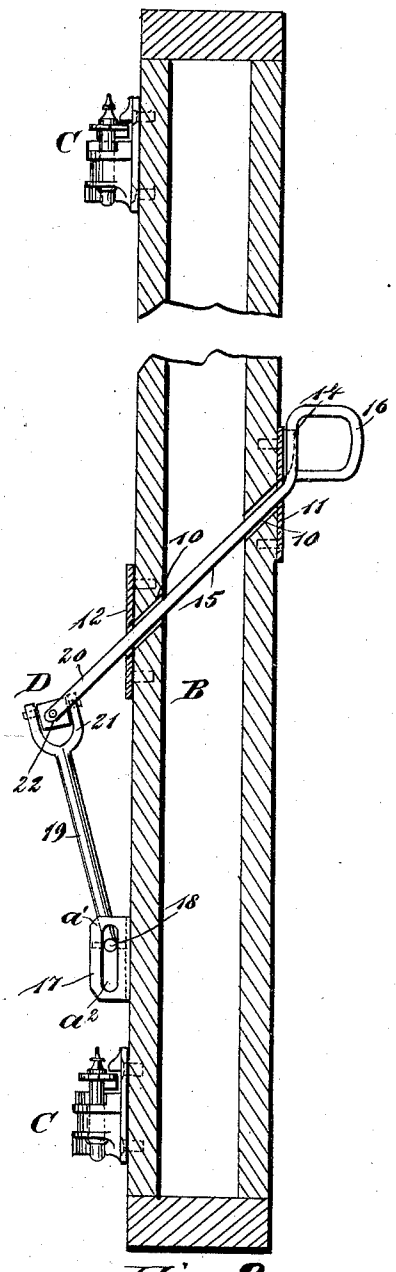


Fig. 2.

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# UNITED STATES PATENT OFFICE.

SARAH MARIA FISHER, OF SPENCER, NEW YORK, ASSIGNOR TO HERSELF AND MARY LOUISA JENNINGS, OF SAME PLACE.

## SHUTTER-WORKER.

SPECIFICATION forming part of Letters Patent No. 476,044, dated May 31, 1892.

Application filed February 23, 1892. Serial No. 422,446. (No model.)

*To all whom it may concern:*

Be it known that I, SARAH MARIA FISHER, of Spencer, in the county of Tioga and State of New York, have invented a new and Improved Blind-Opener, of which the following is a full, clear, and exact description.

My invention relates to an improvement in blind-openers, and has for its object to provide a device of exceedingly simple, durable, and economic construction and capable of being manipulated from the inside of a room in such a manner as to open or to close the blinds; and a further object of the invention is to so construct the device that the blinds may be held locked either in an open or closed position.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in both the views.

Figure 1 is a side elevation of one side of the window-frame and a portion of one blind hinged to the frame and illustrating, also, the application of the device to the blind and the frame; and Fig. 2 is a vertical section through the window-frame, taken practically on the line 2 2 of Fig. 1.

In carrying out the invention the blind A is hung to the window-frame B by means of any suitable form of hinges C. In the sides of the window-frame B diagonal openings 10 are produced, the openings extending from the inner or front side of the frame downward through its outer side, as best shown in Fig. 2. A wear plate or washer 11 surrounds the inner end of the opening, said plates being attached to the inner face of the window-frame, and a like plate 12 is preferably secured to the outer face of the frame surrounding the lower portion of the opening. The inner plate or washer 11 is provided with two lugs 13 and 14, attached to or constituting an integral portion of the plate, as shown in dotted lines, Fig. 1, the said lugs being arranged at angles to each other and at some distance apart. In the openings 10 of the frame a draw-rod 15 is located, said rod being capable of free end movement in the opening. The inner end of the rod, or that end adapted to be located within the room, is preferably provided with a loop-like handle 16, and this handle is vertically located, so that it may enter the space between the lugs 13 and 14 upon the inner face-plate, and when the handle is in this position the draw-rod 15 cannot be turned.

At the lower portion of the blind A, upon its outer face and near the edge contiguous to the side of the window-frame, a bracket 17 is secured, which bracket comprises a plate $a$, screwed or otherwise attached to the blinds and provided at its outer ends with outwardly-extending ears $a'$, each of the ears being provided with a vertical slot $a^2$. In the slots of the bracket a bar 18 is located, extending from ear to ear, and a rod 19 is secured to the bar 18, the attachment of the rod to the bar being such that the rod extends at an angle less than a right angle with relation to the bar and extends upward in direction of the lower end of the draw-rod 15, with which end of the draw-rod the connecting-rod 19 is coupled.

The coupling D consists in forming at the lower end of the draw-rod 15 a fork 20 and producing at the upper end of the connecting-rod 19 a similar fork 21, one fork being horizontally located and the other vertically placed, and the forks are pivotally connected through the medium of a block 22, which block is pivoted in one of the forks and the other fork is attached directly to the block, the fork attached to the block being ordinarily that attached to the draw-rod 15.

The hinges C employed are preferably of that type which when the blinds are closed or opened will lock said blinds in such chosen position, and before a blind can be carried either from a closed to an open position, or vice versa, it is necessary that the blind should be slightly lifted. Therefore in the manipulation of the device—when the blind is closed, for instance, and it is desired to open it—the handle 16 of the draw-rod is grasped by the operator and drawn inward—that is, in the di-

rection of the room—out of engagement with the lugs 13 and 14. By thus drawing upon the rod 15 the connecting-rod 19 is raised to such an extent that its bar 18, connected with the bracket, will also be elevated, and therefore the blind will be lifted a sufficient distance upward to permit the hinges to operate. After the draw-rod has been carried upward in the direction of the room the blind is opened by turning the handle 16, and as through the medium of the handle the draw-rod 15 is revolved a twisting action is brought to bear upon the connecting-rod 19, which motion is communicated directly to the blind and the blind is swung upon its hinges in the direction in which the draw-rod 15 is revolved. After the blind has reached its full open position the handle of the draw-rod will be in its normal or vertical position and the handle of the rod upon being released will drop again between the lugs 13 and 14, and to permit this dropping action by the draw-rod a recess 23 is preferably formed in the blind above the bracket and opposite the coupling D. The weight of the rods 15 19 causes rod 15 to slide downward when released, and thus bring its handle into the recess formed by the two lugs.

It will be observed that this fastener is of exceedingly simple, durable, and economic construction and that it is capable of being expeditiously and conveniently manipulated from within a room, thus obviating the necessity of the operator being exposed to the air in opening or closing the blinds of a window. It will be understood that one of the devices is employed in connection with each blind of a window-frame.

It is evident that the plate 11 may be turned in such manner that it will serve to lock the blinds when in a partially-opened position.

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

The combination, with the frame and shutter, of the sliding and rotating rod 15, extending from the inner side of the frame downwardly and outwardly therethrough and provided at its inner end with a fixed handle, the inner plate 11, having lugs between which the handle passes, the outer plate 12, the rod 19, having a universal connection with rod 15, the vertically-slotted bracket 17, and the cross-piece 18 on the lower end of rod 19 and mounted at its ends in said slots, substantially as set forth.

SARAH MARIA FISHER.

Witnesses:
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