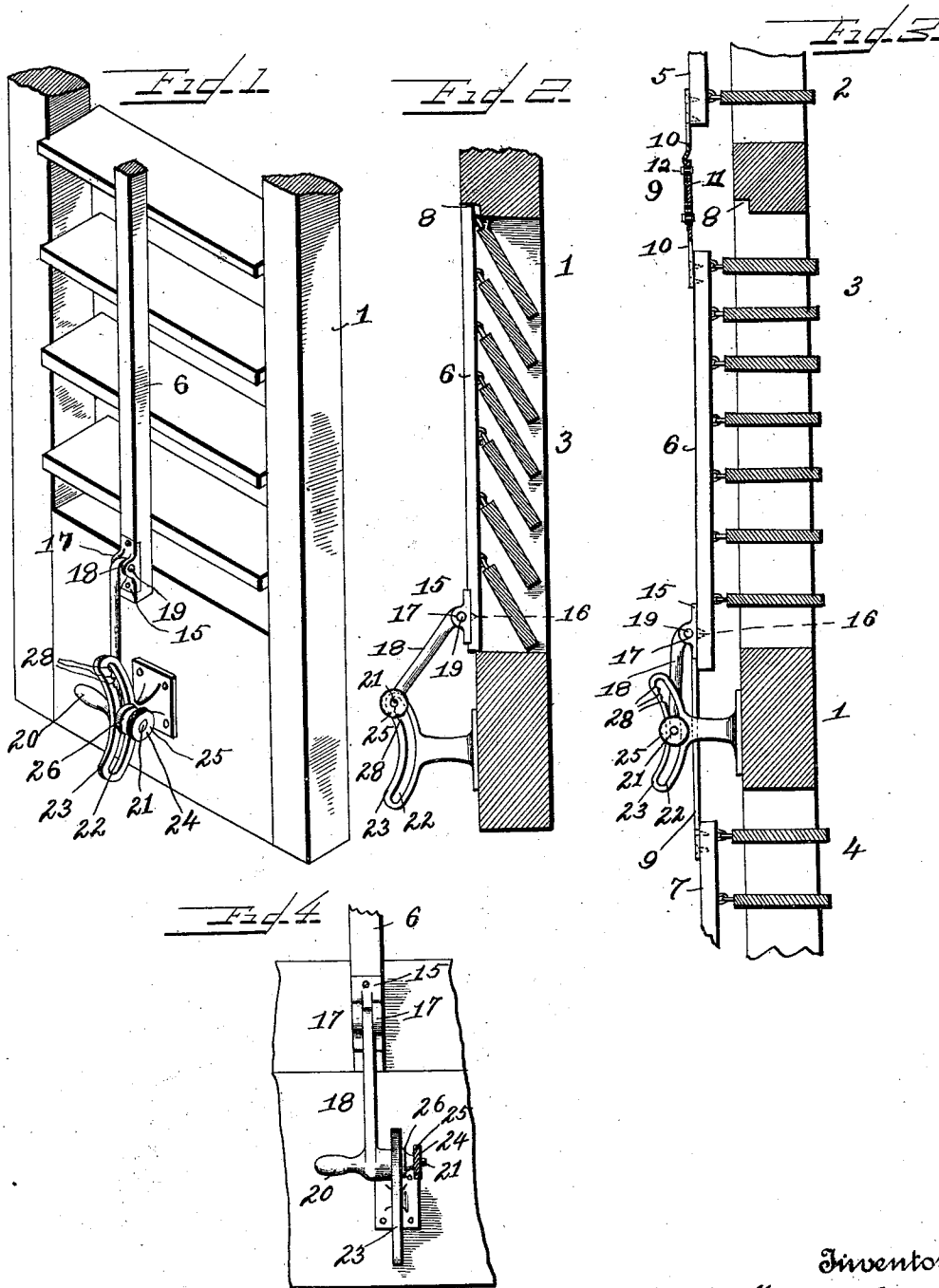


(No Model.)

M. McMAHON.  
BLIND STOP.

No. 542,965.

Patented July 16, 1895.



Witnesses  
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# UNITED STATES PATENT OFFICE.

MICHAEL McMAHON, OF TOLEDO, OHIO.

## BLIND-STOP.

SPECIFICATION forming part of Letters Patent No. 542,965, dated July 16, 1895.

Application filed April 6, 1895. Serial No. 544,739. (No model.)

*To all whom it may concern:*

Be it known that I, MICHAEL McMAHON, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Blind-Stops; 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 appertains to make and use the same.

My invention relates to blind-slat adjusters and locks for the movable slats of door and window blinds, and is adapted to be applied to either inside or outside blinds for windows or to the series of blind-slats used upon blind-doors. It is especially adapted to effect the simultaneous adjustment of two or more series of slats used upon such blinds and to firmly lock them in their closed position, the whole operation being accomplished in an easy and convenient manner.

A further object of the invention is to provide a construction by means of which a direct downward pull will be had upon the slat-rods of the series of slats, so that this swiveled rod will be squarely seated in the socket provided therefor, and also to allow the use of a connecting-bar between the slat-rods of the adjacent sections of slats, which will constitute a rigid connection between the several sections, so that they may be simultaneously adjusted and secured to their adjusted position.

The invention consists in the particular construction and combination of the several parts by which such results are obtained, and which are hereinafter described by the specification and defined by the claims.

Referring to the accompanying drawings, which form part of this specification, Figure 1 is a perspective of a portion of a blind, showing my adjusting and locking device. Fig. 2 is a vertical section through the same with the parts locked in position. Fig. 3 is a vertical section through the series of slat-sections, illustrating the application of the invention. Fig. 4 is a detail enlarged view of the adjusting means.

In the drawings, 1 represents a window or door blind, which may be of any desired construction and may have as many series or

sections of slats as desired. In the present instance the blind has been illustrated as provided with three sections of slats 2, 3, and 4, all pivoted in the usual manner and the slats of each section connected together by the swivel-rods 5, 6, and 7. In the cross-pieces of the blind-frame there are formed the usual sockets 8, into which the ends of the swiveled rods fit when the slats of the blind are closed. These swiveled rods are rigidly connected together by means of plates 9 screwed or otherwise secured upon the adjacent ends of the rods. This plate 9 may be formed of a single piece of metal formed concave on its under side, so as to strengthen it and cause it to fit closely to the surface of the slat-rods, as shown at the lower part of Fig. 3, so that the plate will not project outward beyond substantially the level of the slat-rods when they are in their open position. This is necessary, as the space between the blinds and the window-sash is very limited and will not permit the use of a plate which extends beyond the slat-rods. Instead of being formed of a single piece of metal, this plate may be formed of two concave parts 10, as illustrated at the upper portion of Fig. 3, the parts being bent, as shown, at their meeting ends. Each plate is also provided at its ends with a series of holes 11 for the purpose of adjusting the plates one upon the other. A small bolt 12 passes through the coinciding holes, so as to secure the parts to their adjustment. This adjustment is necessary when the plate is used on new blinds, as the slat-rods are liable to shrink unevenly, so that when one series of slats are completely closed the other will remain partially open. In such an event the parts of the plate are adjusted upon each other to compensate for the shrinkage and secured together, so that the several series of slats will be simultaneously completely closed when the device is operated.

The rod 6 has secured thereto at its lower end the plate 15, which has a projection 16 upon its under side, adapted to be driven into the surface of the rod to secure the plate in position. The plate is also secured by means of screws or other suitable fastening means. This plate has formed upon its surface two lugs or ears 17, between which fits the upper

end of the lever 18. A bolt or rivet 19 passes through apertures in the lugs and lever to secure the parts in pivotal connection.

At the lower ends of the lever 18, and integral therewith is formed a handle-bar 20 on one side and a screw-threaded projection 21 upon the opposite side of the lever. This projection passes through a guide-slot 22, formed in the bracket 23, and is provided with an interiorly-screw-threaded clamping-nut 24 formed with an enlarged corrugated portion 25 to serve as a thumb-hold in the operation of the nut. A shoulder 26 is formed at the termination of this projection 21 and bears against one side of the bracket when the nut is clamped against the opposite side of the bracket. It is obvious that the handle-bar 20 might be omitted and the device adjusted by means of the clamping-nut 24. The bracket 23 is secured to the blind-frame by means of screws or other fastening means passed through it bases 27.

When the nut is clamped in position at any point along the slot 22 the parts will be held against movement, so that the several series of slats will all be secured in the position to which they have been adjusted until a change in their position is desired, which may be accomplished by loosening the clamping-nut and moving the handle-bar to bring the parts to the position desired and then again securing the handle-bar in contact with the bracket by means of the clamping-nut.

The bracket when used with the handle-bar, as illustrated in Figs. 3 and 4, is located slightly to one side of a vertical line passing through the center of the slat-bars, so that a connecting-plate may extend from a slat-rod above the bracket to a slat-rod connected to a series of slats below the bracket. By thus locating the bracket the movement of the connecting-plate will not be interfered with.

The slot 22 in the bracket is formed on the arc of a circle with its ends extending outwardly from a central point and from the blind-frame. On one wall at the upper end of this slot there are formed a series of recesses or notches 28, into which the projection 21 from the lever is adapted to fit when the slats are closed. When the projection rests in any one of this series of recesses and the lever is consequently at the upper outwardly-extending end of the slot, the lever is held in such an angular position that the slats are locked firmly against any movement tending to open the same.

By the use of the arrangement of parts illustrated a straight downward pull is exerted upon the slat-rods, and in view of the fact that the swivel-rods are all connected to the slats by swivel-joints it is essential that the pull on the rods should be straight downward in order that the ends of the swivel-rods may

seat themselves in the sockets provided therefor when the slats are closed. By connecting the several slat-rods by the connecting-plates I secure a stiff and rigid slat-rod extending from top to bottom of the blind, so that all the slats are adjusted simultaneously and accurately.

By the use of the construction of bracket illustrated and described the slats may be readily adjusted to any degree of inclination desired and securely held in their adjusted position. When the slats are completely closed and the lever is at the upper end of the slot any pressure applied against the lever only serves to force it against the outer wall of the slot or into one of the recesses and firmly locks the parts against movement from the outside.

The construction hereinbefore described provides a blind-slat adjuster by means of which the slats of the several adjacent sections can be simultaneously adjusted with perfect ease and securely fastened in their adjusted positions. It is very simple of construction and consequently cheap to manufacture, and in operation the parts are reliable and not liable to get out of working condition.

Having described my invention and set forth its merits, what I claim, and desire to secure by Letters Patent, is—

1. In a blind slat adjuster, the combination with a lever pivoted at its upper end to the slat rod, of a bracket formed with a segmental slot curving outwardly at its ends from the blind frame, and means for securing the lower end of said lever to its adjusted position in said slot, substantially as described.

2. In a blind slat adjuster and lock, the combination with a lever pivoted at its upper end to the slat rod, of a bracket formed with a segmental slot curving outwardly at its ends from the blind frame, and recesses formed in the wall of said slot at its upper end and adapted to engage the lower end of said lever, substantially as described.

3. In a blind slat adjuster and lock, the combination of a plate having pivoting lugs thereon secured on the slat rod, a lever pivoted to said plate at its upper end, a bracket secured to the blind frame, a slot in said bracket extending outwardly at both ends from its center, a lateral screw threaded projection on said lever, and an interiorly screw threaded thumb nut on said projection and adapted to clamp the projection at various adjustments in said slot, substantially as subscribed.

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

MICHAEL McMAHON.

Witnesses:

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