

S. M. G. LUND.
Blind-Slat Adjuster.

No. 163,019.

Patented May 11, 1875.

Fig. 2.

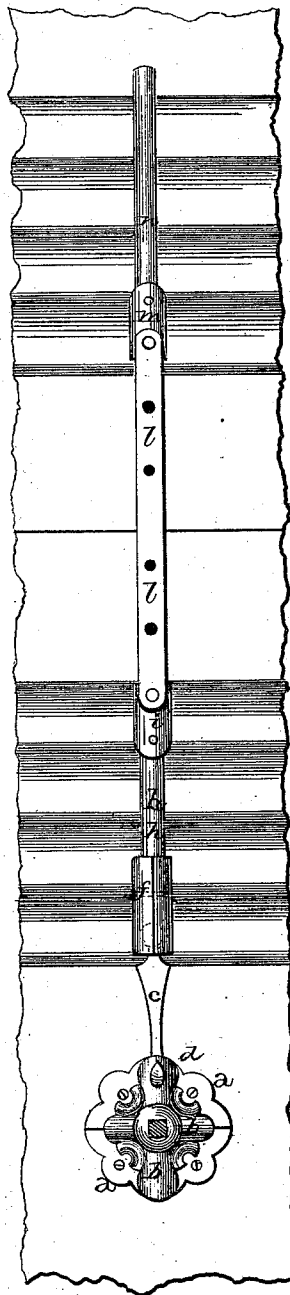


Fig. 1.

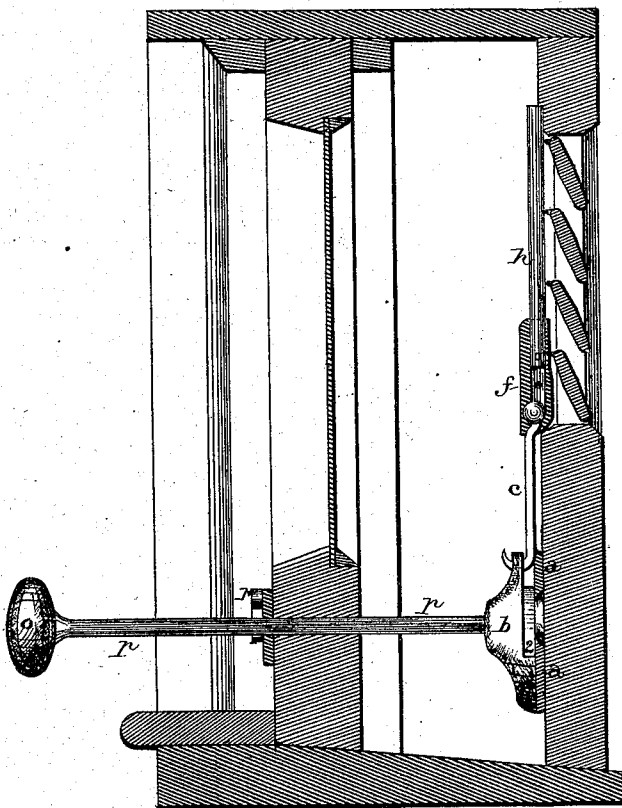
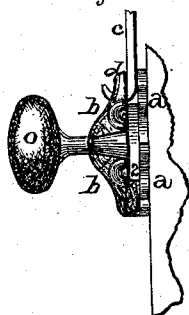


Fig. 3.



WITNESSES.

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SÖREN M. G. LÜND, OF RACINE, WISCONSIN.

IMPROVEMENT IN BLIND-SLAT ADJUSTERS.

Specification forming part of Letters Patent No. **163,019**, dated May 11, 1875; application filed April 3, 1875.

To all whom it may concern:

Be it known that I, SÖREN MARTINIUS GÜNDERSEN LÜND, of Racine, in the county of Racine and State of Wisconsin, have invented certain new and useful Improvements in Devices for Operating the Slats of Window-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 devices for operating the slats of window-blinds; and it consists in a novel arrangement and combination of devices that will be hereinafter more fully described, and then pointed out in the claim.

The accompanying drawings represent my invention, in which Figure 1 is a sectional view, showing the rod and key extending into the room. Fig. 2 is a face view, with the connecting rod or link; and Fig. 3 shows the main device, with operating key only.

A represents a divided plate, fastened at the bottom to the inside of the blind, which plate forms a bearing for a knob or cam, *b*. The plate *a* consists of two parts, and holds a projection from the under side of the cam or knob *b*, in a recess formed in its center. This knob or cam has a projection upon its top, and a portion of its inner top edge cut away so as to allow the connecting-rod or pitman *c* that is attached to the projection to move freely between the inner side of the projection and the blind. The ends of the cut-away portion also form stops 2, against which the rod strikes when the knob or cam has moved far enough around. This cam or knob has in its center a square hole for the admission of a key or rod, by which to turn the cam or knob to the right or left. Above the square hole in the projection *d* is an opening for attaching the pitman or connecting-rod *c*, which extends upward and terminates in a head, which is inclosed between the two parts forming the guide *f*, and constitutes a ball-and-socket joint. In the upper end of the guide *f* is attached the blind-slat rod *h*, to the inner side of which are hinged the slats of the blinds. To the upper end of the slat-rod *h*, by means of the hook *i*, the connecting rod or link *l* is attached, the length of which link or rod equals the width of the cross-piece in the

blinds. The other end of the rod or link *l* is held by a hook, *m*, attached to the upper slat-rod *n*, to which the slats of the upper half of the blinds are hinged. Thus a connection between the part *b*, the rods, and slats, is established, so that if one part is moved all the other parts are similarly acted upon; hence, by turning the cam or knob *b* by means of the key or otherwise, the rod and slats hinged thereto are either pushed up or drawn down; but if the rod or pitman *c* is placed in a perpendicular position, the slat-rods are held rigidly and the slats firmly closed.

A key in the form of a knob, *o*, may be placed in the blinds, and there remain permanently; but to avoid the raising of the window-sash, when it is desired to open or shut the slats, a hole may be made through the window-sash, through which a rod, *p*, terminating in a knob, *o'*, is passed into the square hole in *b*, and the hole in the sash be covered by a shield, *r*. Lc

I am aware that devices of various kinds have been used for the purpose of opening and closing the blind-slats, but I am not aware that a knob or cam that has stops formed upon it to limit the movements of the slats has ever before been used, or that it is adapted to be operated either by hand or by a rod that extends into the room. Neither am I aware that guides have been made in two pieces, and connected to the rod by a ball-and-socket joint, so as to allow the rods a free play. Where stops are not made on the knob or cam, this ball-and-socket joint may be so adjusted as to act in the place of the stops.

Having thus described my invention, I claim—

The combination of the divided plate *a* carrying knob or cam *b*, having stops 2, and adapted to be operated either by hand or by a rod and key, *p o*, extending into the room, the rod or pitman *c* connected with the blind-slat-rod *h* by a ball-and-socket joint, and the two-part-guide *f i*, with or without connecting rod or link *l*, all substantially as described and shown, for the purpose set forth.

In testimony that I claim the foregoing, I have hereunto set my hand this 22d day of March, 1875.

SÖREN MARTINIUS G. LÜND.

Witnesses:

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C. T. SKAU.