W. H. Babcock,

Blind Stop.

No 21,732. Patented Oct. 12, 1858.

Fig: 1.

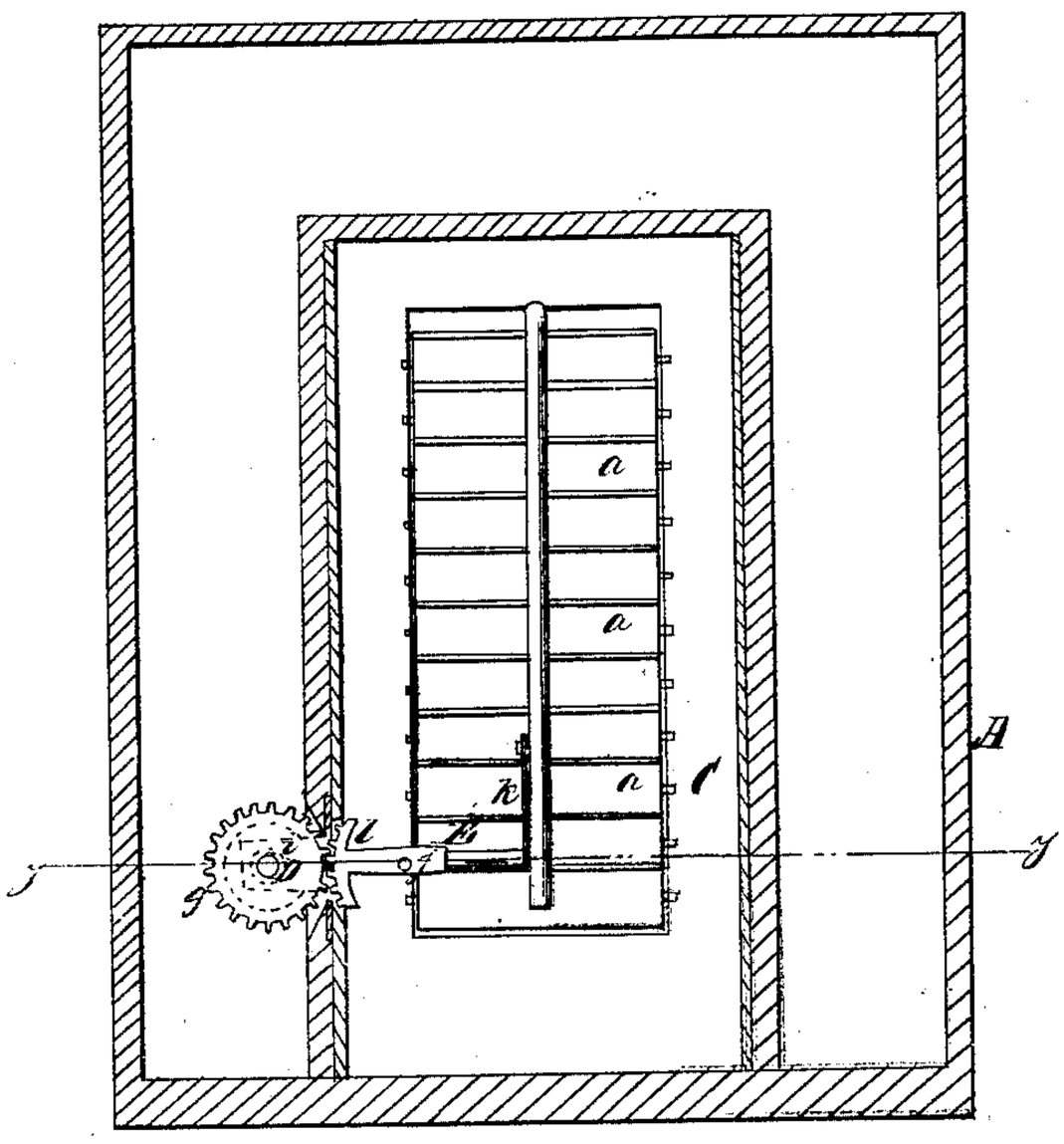


Fig: 3

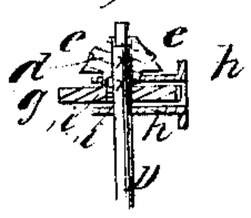
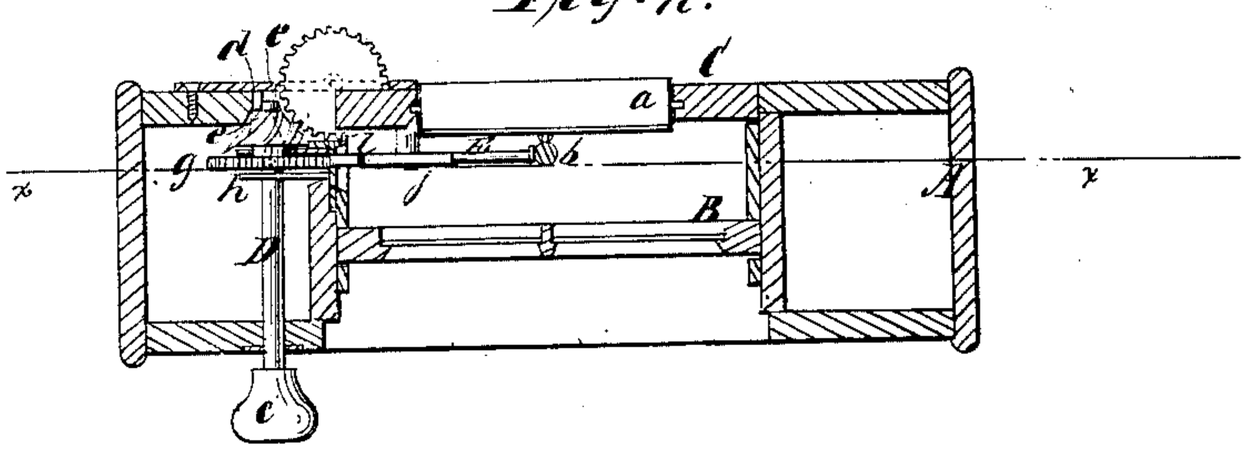


Fig: 2.



UNITED STATES PATENT OFFICE.

W. H. BABCOCK, OF HOMER, NEW YORK.

METHOD OF ADJUSTING WINDOW-BLINDS.

Specification of Letters Patent No. 21,732, dated October 12, 1858.

To all whom it may concern:

Be it known that I, W. H. BABCOCK, of Homer, in the county of Cortlandt and State of New York, have invented a new and useful Attachment for Window-Blinds; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a vertical section of a window casing, taken in the line *x*, *x*, Fig. 2. Fig. 2, is a horizontal section of the casing, window sash, and blind, taken in the line *y*, *y*, Fig. 1. Fig. 3, is a detached section of the arbor and its gearing *g*, *d*.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in having an arbor pass horizontally through the casing near the lower part of the blind, said arbor being allowed to slide longitudinally in its bearings to a certain extent so that a conical screw or spiral flanged pinion which is on the outer end of said arbor and gears into a toothed wheel on the blind may be connected with and disconnected from the arbor as desired, a toothed wheel being also placed loosely on the arbor, which wheel, when the blind is closed, gears into a segment rack on a lever which is connected with the slat rod, the whole being arranged as hereinafter described, whereby the blind by adjusting the arbor and properly turning the same, may be opened and closed at the inner side within the room without raising the sash and the slats, when the blind is closed also adjusted.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A, represents a window casing, B, the sashes, and C, the blind with movable slats *a*, provided with a rod *b*. The above parts are all of usual construction and do not therefore require a minute description.

D, is an arbor which is fitted horizontally in the lower part of the casing A, near the lower end of the blind. This arbor has a knob *c*, at its inner end and its outer end is provided with a cone *d*, which is placed loosely on it, said cone having spiral flanges *e*, on its face or periphery, see Fig. 2. The arbor D, is allowed to slide longitudinally in its bearings to a certain extent.

To the lower part of the blind C, near its lower hinge a toothed wheel *f*, is attached, and the cone *d*, gears into the wheel *f*, at all times. The cone *d*, is connected with the arbor D, when the latter is shoved within the casing by means of a feather *i*, which fits in a groove $i^{\times}$, in the cone see Fig. 3.

On the arbor D, a wheel *g*, is placed loosely. This wheel is fitted between two plates *h*, *h*, which are secured permanently within the casing and through which plates the arbor D, passes. The wheel *g*, is made to turn with the arbor by means of the feather *i*, and a groove $i^{\times\times}$, as shown in Fig. 3, the arbor at the same time being allowed to slide through the wheel *g*, it will be seen therefore that when the cone *d*, is connected with the arbor D, the wheel *f*, is disconnected from it and vice-versa. This effect is due to the employment of one feather working in the grooves of both the cone *d*, and wheel *g*.

E, is a lever which is pivoted to the blind C, as shown at *j*. One end of the lever is connected by an arm *k*, with the slat rod *b*, and the opposite end has a segment rack *l*, formed on it, which rack, when the blind is closed, gears into the wheel *g*.

The operation will be readily seen. When it is designed to open or close the blind C, from within the room without raising the sash B, the arbor D, is shoved within the casing so that the feather *i*, in the arbor D, will fit in the groove $i^{\times}$ of the cone *d*, and thereby connect said cone with the arbor D. The arbor D, then when it is turned will through the medium of the gearing *d*, *f*, actuate the blind, and it may be opened or closed as desired. If the blind be closed and it is designed to adjust the slats *a*, the rod D, is drawn out as far as possible from the casing so that the flanges *e*, will be free from the wheel *f*, and as the segment rack *l*, falls in gear with the wheel *g*, when the blind is closed, it follows as a matter of course that by turning the rod D, when drawn out from the casing, the slats *a*, may be adjusted more or less open as desired without moving the blind. Thus it will be seen that by actuating one and the same arbor D, the blind C, by a proper adjustment of the arbor, may be opened and closed from the inner side of the apartment and the blind slats *a*, also adjusted to be more or less open.

I would remark that the feather and groove *i*, are so arranged that when the cone *d*, and wheel *f*, are in gear, the wheel *g*, will be disconnected from arbor D, and the wheel connected with the arbor when the cone *d*, is out of gear with the wheel.

I am aware that gearing has been applied to blinds for the purpose of opening and closing them from within an apartment without raising the sash,—I therefore do not claim the within-described contrivance for operating the blinds, nor the contrivance for operating the slats; but—

What I claim as new, and desire to secure by Letters-Patent, is:—

The sliding spindle or arbor for alternately engaging the two mechanisms which severally move the slats and open the shutter, so as to operate either mechanism by the same handle, substantially as herein shown and described.

W. H. BABCOCK.

Witnesses:
W. TUSCH,
W. HAUFF.