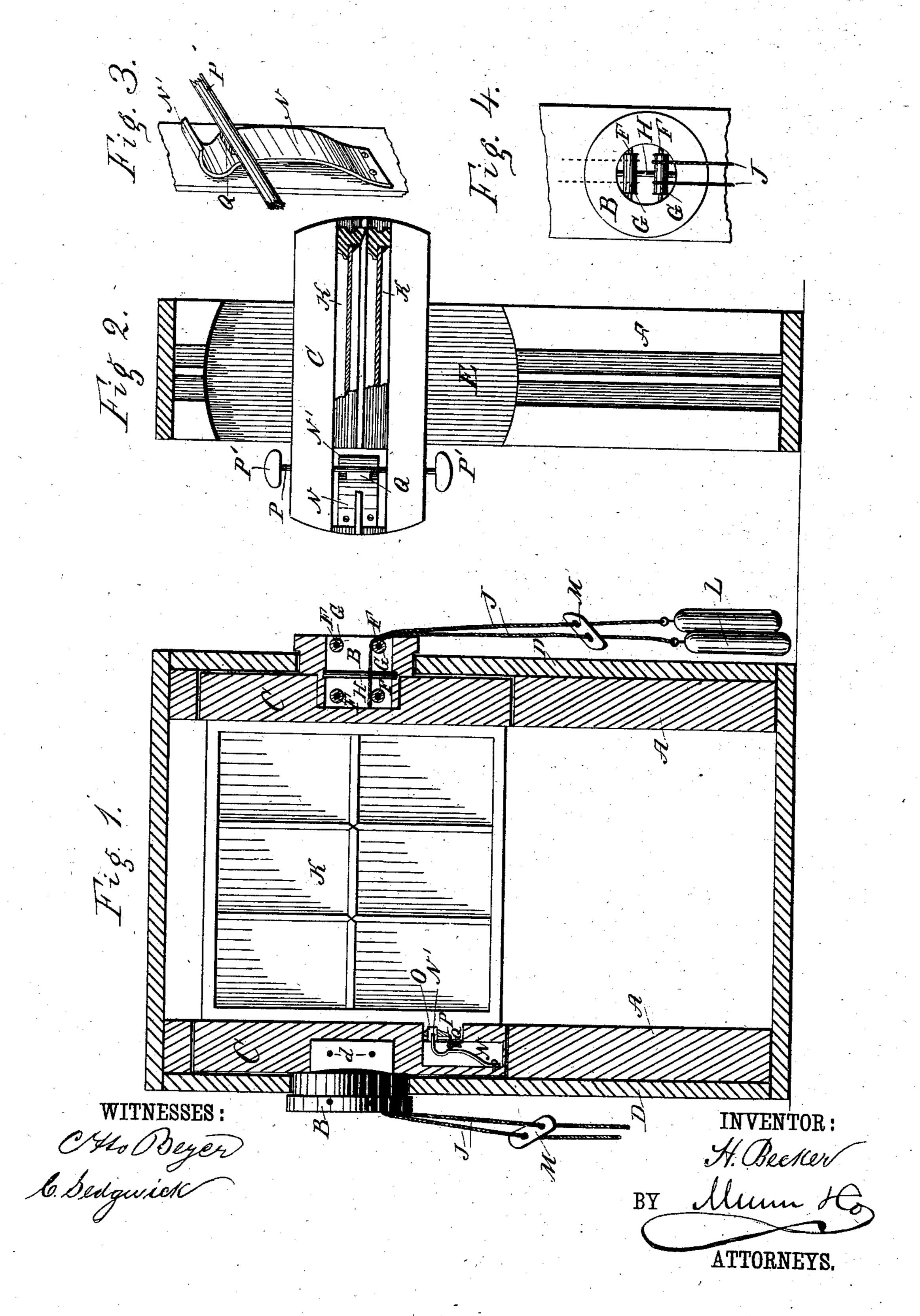
## H. BECKER.

## REVERSIBLE WINDOW.

No. 259,080.

Patented June 6, 1882.



## United States Patent Office.

HENRY BECKER, OF NEW YORK, N. Y.

## REVERSIBLE WINDOW.

SPECIFICATION forming part of Letters Patent No. 259,080, dated June 6, 1882.

Application filed March 31, 1882. (No model.)

To all whom it may concern:

Be it known that I, HENRY BECKER, of the city, county, and State of New York, have invented a new and Improved Reversible Window, of which the following is a full, clear, and exact description.

The object of my invention is to facilitate the reversing of windows for repairing and cleaning the panes and sashes from the inside.

The invention consists in certain combinations, which will first be described in connection with the drawings, and then pointed out in the claims.

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

Figure 1 is a longitudinal elevation of my improved reversible window, parts being shown in section. Fig. 2 is a cross-sectional elevation of the same, showing the swinging part of the window turned at right angles to the windowframe. Fig. 3 is a detail perspective view of the spring for locking the sashes in position. Fig. 4 is an outside end elevation of the pivot of the swinging part of the window.

In the window shown, which is provided with the usual pulley-stiles, stop-beads, &c., the upper part or half of the window-jambs are adapted to swing on pivots B, attached to the middle of the swinging frames C of the window, which pivots pass through suitable apertures in the side standards, D, of the window frame. The ends of the swinging frames C are rounded, as are also the ends of the recesses E in the window-jambs A, into which recesses the swinging frames C fit. The pivots B are made hollow, and are secured at the squared inner end in an

aperture in each swinging frame C by means of pintles d, passed transversely through the swinging frame into the inner ends of the pivots. Each pivotis provided at the outer and inner ends with two transverse wires or pintles, F, crossing the aperture of the pivot, on which pintles rollers or pulleys G are mounted. Each pivot is further provided at the middle with a

pintles rollers or pulleys G are mounted. Each pivot is further provided at the middle with a transverse wire, H, at right angles to the wires or pintles F.

The sash-cords J are attached to the sashes the pivots, and will prevent entangling of the cords K K' near the middle of the sides, and pass through suitable openings in the swinging frame C, into and through the hollow pivots B, one of the rollers G. The spring-catch N holds

and to the lower ends of these cords weights L, of the usual construction, are attached. The cords J also pass through an apertured plate, 55 M, which prevents twisting and entangling of the cords. The cords pass between the two pulleys or rollers G at the ends of the pivots, and the cords are separated by the wire H, as shown in Fig. 4.

In the lower part of one of the swinging frames C of the window a spring, N, is fastened, the upper end, N', of which is bent to project slightly from the two pulley-stiles, so that this upper bent end of the spring can pass into 65 notches O in the edges of the sashes.

A shaft, P, provided at each end with a handle, P', is journaled transversely in the swinging frame C of the window, and this shaft P is provided with a lug, Q, opposite the spring N. 70 By turning the shaft P the lug Q presses the spring N inward, thereby withdrawing the bent upper end of the spring from the notch or recess O. The sashes may be provided with a series of notches, O, for locking the sashes in 75 different positions; but in all cases the sashes must be provided with a notch, O, near the bottom.

The swinging frames Care provided with longitudinal stop-beads and separating-strips in 80 the same manner as the window-jambs.

The operation is as follows: If the sashes are to be reversed, the lower sash is raised until it is within the swinging or pivoted frames C, and is locked in this position by means of the up- 85 per projecting end of the spring N, which passes into the notches O. Both sashes will then be between the swinging or pivoted frames C, and these swinging frames, with the sashes, can be swung one hundred and eighty degrees, so that 90 they will be inverted, and the positions of the sashes in relation to the room will be reversed. The outer surfaces of the sashes, frames, panes, &c., can be washed and cleaned or a new pane inserted, &c., by a person within the room, and 95 the dangerous practice of climbing out on the window-sill to clean the panes can be abandoned. The sash-cords J always run over one set of rollers or pulleys G, and the wire H will always retain the cords in the proper place in 100 the pivots, and will prevent entangling of the cords in the pivot, and in whatever position the pivot may be the cords will always rest on

the sashes in the swinging frames C, and prevents the sashes from sliding out of the frames C while swinging the same. After the sashes and frames have been swung back into their 5 original position, the upper end of the spring N is pressed inward by turning the shaft P, thereby releasing the sashes.

If desired, the weights L and cords J can be dispensed with entirely, and the spring N only 10 used to lock the sashes in the desired positions.

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

1. In a reversible window, the combination, 15 with the window casing and sashes, of swinging frames in the window-jambs and of hollow pivots attached to these frames and passing through or into the side standards of the window-frame, substantially as herein shown and 2c described, and for the purpose set forth.

2. In a reversible window, the combination, with a window frame and sashes, of the swinging side frames, C, fitting in recesses E in the window-jamb, the hollow pivots B, the sash-25 cords J, and the weights L, substantially as herein shown and described, and for the pur- ${f posesson}$ 

3. In a reversible window, the combination,

with the window frame and sashes, of the swinging frames C, the hollow pivots B, and the 30 rollers or pulleys G, the sash-cords J, and the weights D, substantially as herein shown and described, and for the purpose set forth.

4. In a reversible window, the combination, with the window frame and sashes, of the swing-35 ing frames C, the hollow pivots B, the rollers or pulleys G, the transverse wire H, the cords J, and weights L, substantially as herein shown and described, and for the purpose set forth.

5. In a reversible window, the combination, 40 with the window frame and sashes, of the swinging frames C, the spring N, and the shaft P, provided with a lug, Q, substantially as herein shown and described, and for the purpose set forth.

6. The combination, with window weightcords and weights, of an apertured plate, M, through which the cords pass, substantially as herein shown and described, and for the purpose of preventing entangling of the cords, as 50 set forth.

HENRY BECKER.

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Witnesses:

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OSCAR F. GUNZ,
EDGAR TATE.