

(No Model.)

2 Sheets—Sheet 1.

R. E. HALL.
WINDOW BLIND OPERATOR.

No. 522,592.

Patented July 10, 1894.

Fig. 1.

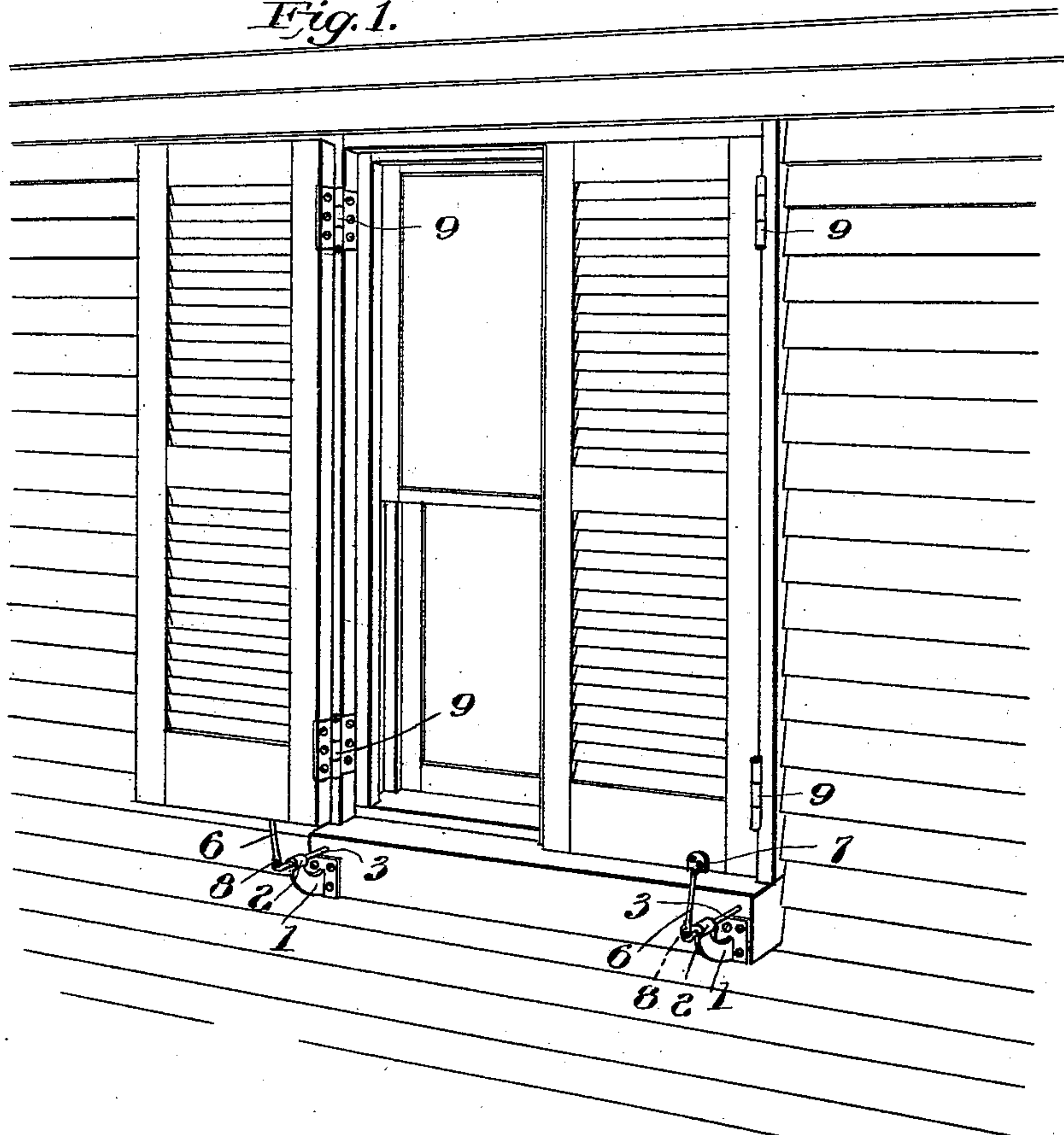
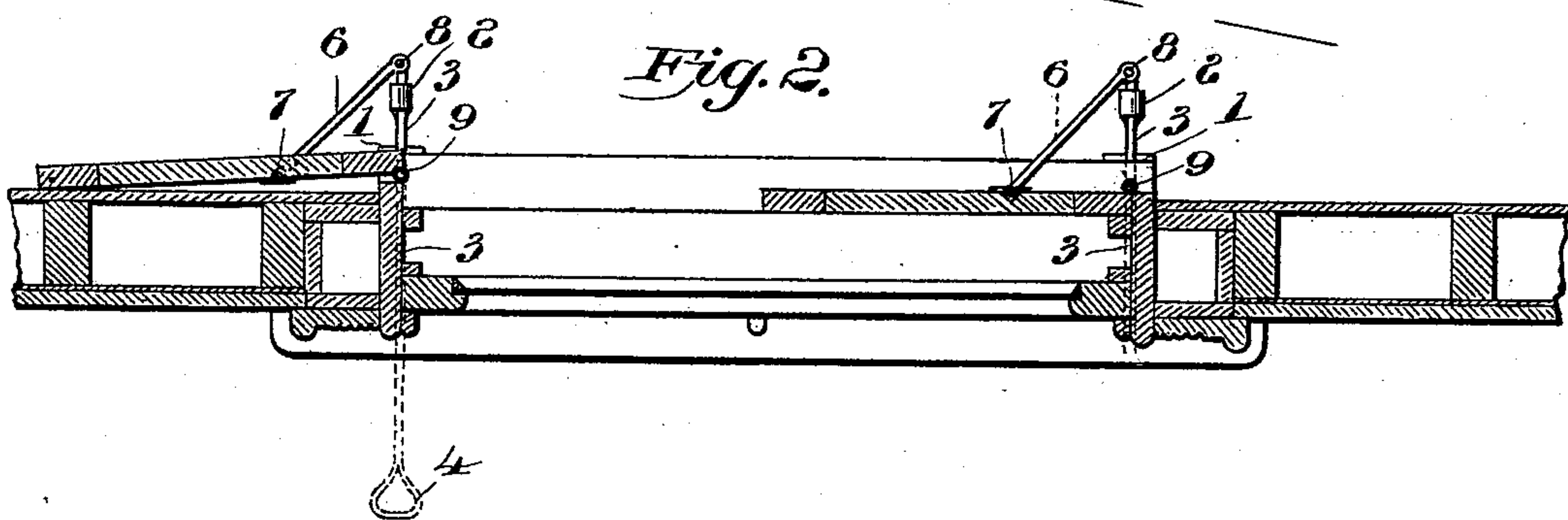


Fig. 2.



WITNESSES:

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INVENTOR

Robert E. Hall.

BY *T. W. Smith Jr.*

ATTORNEY

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2. Sheets—Sheet 2.

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Fig. 3.

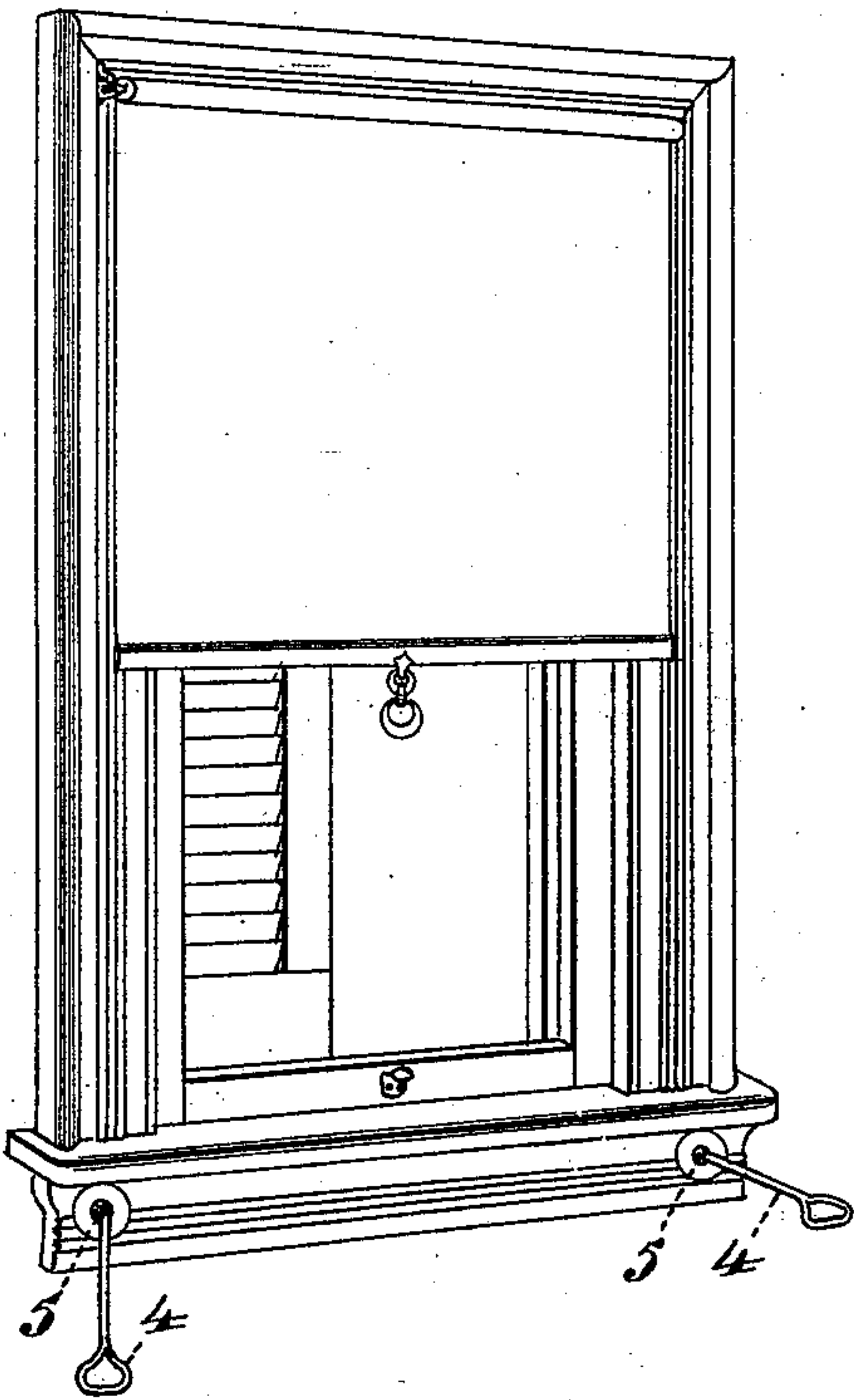
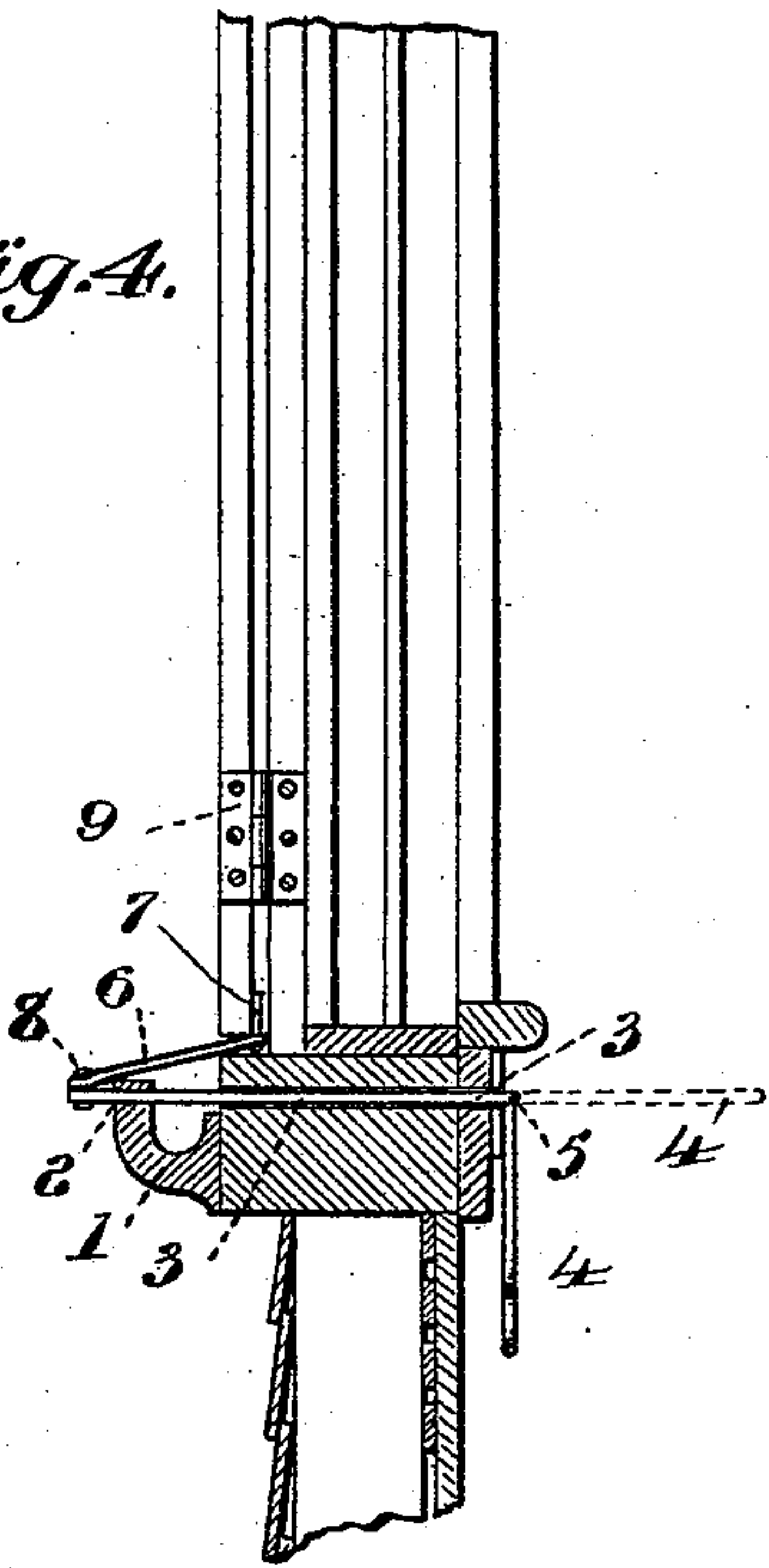


Fig. 4.



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UNITED STATES PATENT OFFICE.

ROBERT E. HALL, OF WATERBURY, CONNECTICUT.

WINDOW-BLIND OPERATOR.

SPECIFICATION forming part of Letters Patent No. 522,592, dated July 10, 1894.

Application filed May 12, 1893. Serial No. 473,933. (No model.)

To all whom it may concern:

Be it known that I, ROBERT E. HALL, a citizen of the United States, residing at Waterbury, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Window-Blind Operators; 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 window shutters or blinds, but has particular reference to devices for operating the window blinds from the outside of a house.

The object of my invention is to provide simple and efficient means for accomplishing this result, and with these ends in view my invention consists in the details of construction and combination of elements such as will be hereinafter fully described and then specifically designated by the claim.

In the accompanying drawings—Figure 1 is an elevation in perspective of a pair of window blinds hung at a window and equipped with my improvement; Fig. 2 a horizontal section of the construction shown in Fig. 1; Fig. 3 an elevation in perspective illustrating the interior appearance of a window in a house when equipped with my improvement, and Fig. 4 a partly broken vertical section.

Similar numbers of reference denote like parts in the several figures of the drawings.

1 is a bracket fastened to the sill outside of the window directly beneath the hinge of the blind, and having at its extremity a bearing 2.

3 is a rod which passes freely through the wall of the house and the bearing 2, and 4 is a handle hinged to the inner end of said rod at 5 in such manner as not to interfere with the free passage of the rod and handle shank back and forth through the wall, and so as to allow such handle to drop down out of the way when the hinge has been drawn to its innermost position.

6 is a link which is pivoted at its ends to the lower edge of the blind and to the outer

extremity of the rod 3. Both of these pivots permit of a horizontal swing only, the vertical pivot pin on the blind being denoted by 7, while 8 designates the similar pin by which the pivotal connection is made with the rod.

The operation of my improvement is as follows: The manipulation of the rod is the same both in opening and closing a blind, it being merely necessary to raise the handle (as shown at the right hand in Fig. 3), push out the rod quickly and then to draw said rod inwardly. The outward thrust of the rod will cause the blind to swing on its hinge 9 by reason of the link which connects the rod and blind, and the momentum will carry the pivotal point 7 on the blind beyond the pivotal point 8 of the rod, the continued movement of the blind being caused by pulling the rod inward. The dropping of the handle removes what would otherwise be an obstruction in a room, and at the same time affords a means for securing the blind in position.

It will be observed that the points 8 and 9 are in the same vertical plane with the rod 3, and this insures a perfect mechanical construction with a dead center only in the axial plane of said rod.

I claim—

The combination of the horizontally supported and guided reciprocatory rod extending through the wall of the building within the interior thereof, the blind hinged at the side of a window and immediately above said rod, and the link pivoted at its ends by vertical pins to the under edge of the blind and the outer extremity of said rod, the blind hinge, the pivotal connection between the rod and link, and the rod itself, being all in the same vertical plane, substantially as set forth.

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

ROBERT E. HALL.

Witnesses:

F. W. SMITH, Jr.,
A. J. TANNER.