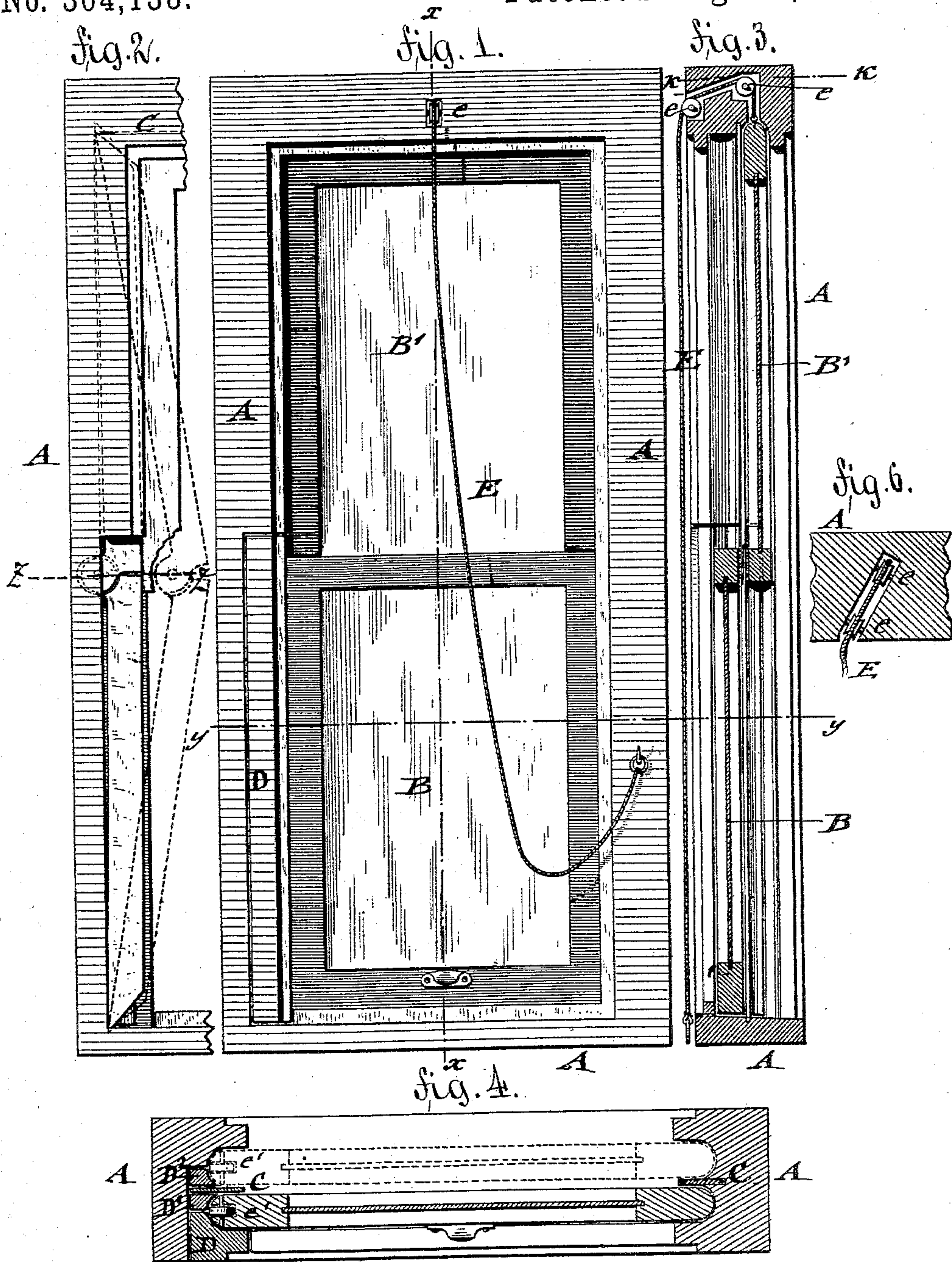


(No Model.)

A. SHMIEDEL.  
WINDOW.

No. 304,138.

Patented Aug. 26, 1884.



WITNESSES:

*For. H. Rosenbaum.*  
*Otto Risch.*

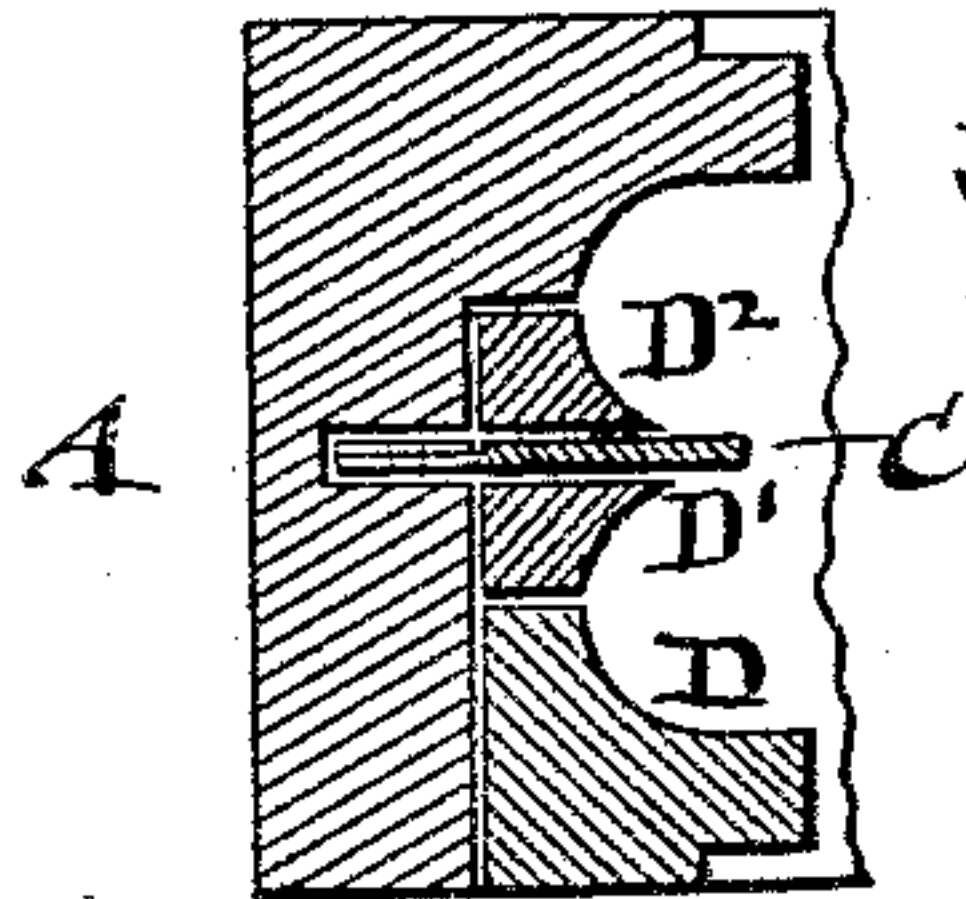


Fig. 5.

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# UNITED STATES PATENT OFFICE.

ALBERT SHMIEDEL, OF WELLSBURG, WEST VIRGINIA.

## WINDOW.

SPECIFICATION forming part of Letters Patent No. 304,138, dated August 26, 1884.

Application filed October 31, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT SHMIEDEL, of Wellsburg, county of Brooke, and State of West Virginia, have invented certain new and useful Improvements in Window-Casings, of which the following is a specification.

This invention has reference to an improved construction of window-casing, by which the balance weights and cords can be dispensed with and both sashes be quickly removed from the casing for cleaning. When the sashes are replaced into position, they are firmly held in position by the window-casing without rattling or shaking.

The invention consists of a window-casing the sides of which guide the sashes by means of semicircular grooves and intermediate metallic partition-strips. The metallic partition-strip at one side of the casing is made of two parts hinged at its center, so as to be detachable, the portion of the casing in front of the partition-strip being made of two detachable sections, the outer one admitting the removal of the lower sash, while the inner one admits the removal of the centrally-hinged partition-strip. A third removable section, back of the partition-strip, admits the removal of upper sash, when the guide sections of the lower strip and the partition-strip are removed.

In the accompanying drawings, Figure 1 represents a front elevation of my improved window-casing. Fig. 2 is a front view of one side of the lower sash removed. Fig. 3 is a vertical transverse section on line *x x*, Fig. 1. Fig. 4 is a horizontal section on line *y y*, Fig. 1. Fig. 5 is a horizontal section on a larger scale on line *z z*, Fig. 2; and Fig. 6 is a detail horizontal section on line *K K*, Fig. 3.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents a window-casing; B, the lower, and B' the upper, sash. The side rails of the lower sash, B, are rounded off, also the side rails and top rail of the upper sash, B', so as to fit closely into the semicircular guide-grooves of the casing A, whereby shaking or rattling is prevented. Metallic partition-strips C extend along the side and top of the casing A, and separate the semicircular guide-grooves, which extend along the side and top of the casing. The partition-strip C at one side of the casing is

made detachable, and is for that purpose made of two halves, which are hinged together at the center of the strip, so that by being taking hold of near its middle the parts of the strip may be set at an obtuse angle to each other, as shown in dotted lines in Fig. 2, so that the strip may be thereby conveniently removed from the casing. The hinge-connection of the partition-strip C' projects into a recess of the casing. (Shown in Fig. 2.)

For the purpose of facilitating the removal of the sashes B B', that side of the window-casing A at which the hinged partition-strip C' is arranged is constructed with three detachable sections, which are of somewhat greater height than that of the sashes, so as to extend from the sill to a point above the meeting-rails of the same. The three detachable sections are set into a recess of the casing A, two sections, D D', being arranged in front of the partition-strip C, while the third section, D<sup>2</sup>, is arranged back of the partition-strip, as shown clearly in Figs. 4 and 5. As the sections guide the sashes, they are grooved at their inner surface for the side rails of the sashes. When the three guide-strips D D' D<sup>2</sup> and the partition-strips C C' are in position, the covering guide-section D is screwed at one or more points to the casing, whereby the sashes are properly retained in position.

When it is desired to remove one or both of the sashes from the window-casing for cleaning or repairs, the fastening-screws of the front section, D, are loosened and the front section, D, is removed. The lower sash may then be readily taken out and removed. The second section, D', is next removed, then the partition-strip C', then the third guide-strip, D<sup>2</sup>, after which the upper sash is moved down into the lower part of the window-casing and removed therefrom.

For replacing the sashes, the upper sash is first placed into position at the lower part of the casing and then raised into its uppermost position, after which the section D<sup>2</sup> is replaced in position, then the partition-strip C', next the guide-section D', after which the lower sash is placed in position, and, finally, the front strip, D, screwed fast again to the casing.

By means of the rounded-off ends of the sashes the insertion and removal of the same from their grooved rails is facilitated without



the necessity of enlarging the depth of the recess or the width of the detachable guide-rails to too great an extent. One or both sashes may be connected to cords E, which are conducted over pulleys *e e* at the top part of the casing and attached to the top rail of the sashes. By arranging the pulleys *e e* in a diagonal recess of the casing, as shown in Fig. 6, and providing each sash at one side, near its upper corner, with an anti-friction roller, *e'*, (shown in Fig. 4,) the sash is drawn over to one side by the strain on the cord E, and thereby easily moved up and down in its guide-grooves to any position, in which it is secured by any approved sash-fastening device.

The advantages of my improved window-casing are that the expense of sash weights and cords is dispensed with; secondly, that a tight fit of the sashes in the casing without rattling or shaking is obtained; and, lastly, that the sash can be conveniently removed from and replaced in the casing.

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

1. The combination of a window-casing having rails with semicircular guide-grooves, intermediate metallic partition-strips, the partition at one side being centrally hinged, an upper and a lower sash having rounded-off side rails, a detachable rail-section back of the partition-strip, and two detachable rail-sections in front of the same, substantially as set forth.

2. The combination of a window-casing having grooved side rails, guide-pulleys located in an inclined recess at the top of the casing, a sash having rounded-off side rails, and an anti-friction roller at one side near its upper corner, and a suspension-cord that is attached to the upper rail of the sash and passed over the guide-pulleys, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

ALBERT SHMIEDEL.

Witnesses:

JNO. C. PALMER,  
SAMUEL GEORGE.