

H. MORTENSON.
WINDOW.

APPLICATION FILED OCT. 6, 1908.

936,147.

Patented Oct. 5, 1909.

2 SHEETS—SHEET 1.

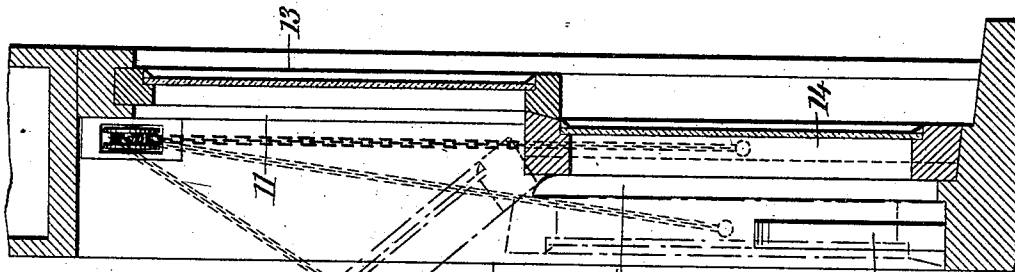


Fig. 2,

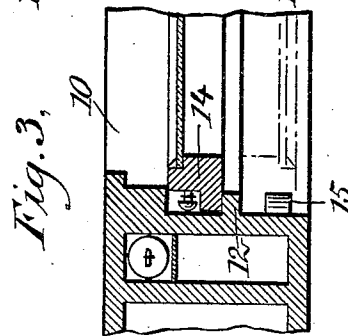


Fig. 3,

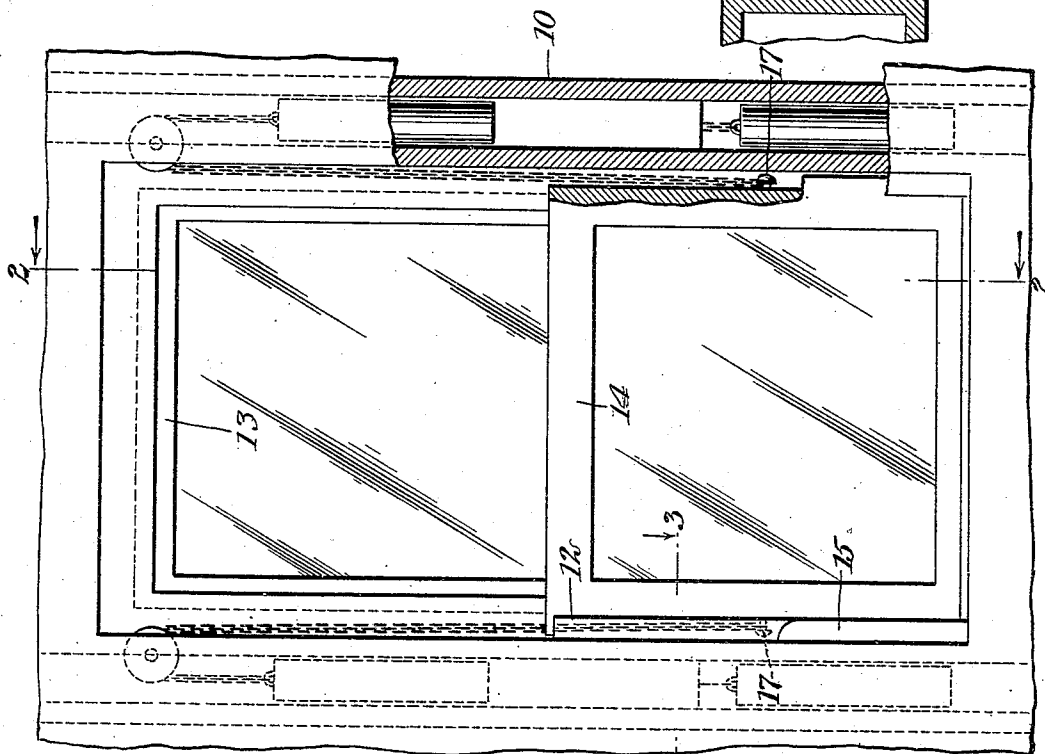


Fig. 1,

WITNESSES
Edw. Thorpe
W. W. Felt

INVENTOR
Hans Mortenson
BY Munn & Co.
ATTORNEYS.

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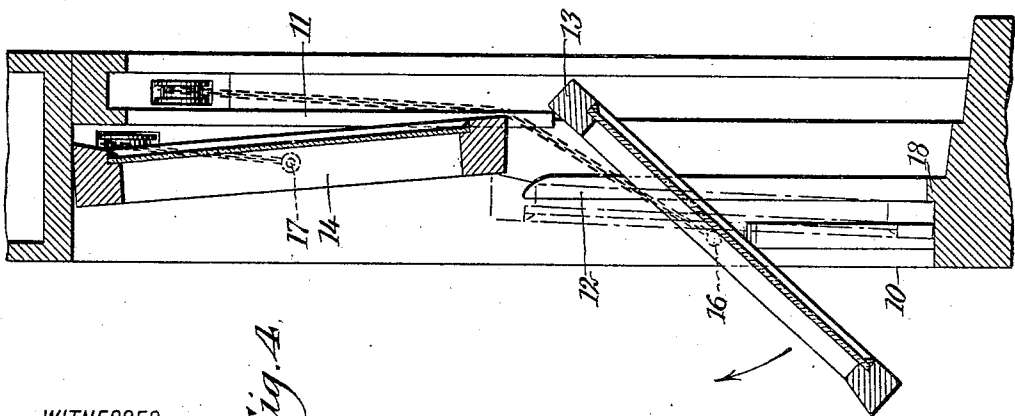


Fig. A.

WITNESSES

Edw. Thorpe
W. W. Fols

INVENTOR

Hans Mortenson
BY *Mum Co.*
ATTORNEYS

UNITED STATES PATENT OFFICE.

HANS MORTENSON, OF NEW YORK, N. Y., ASSIGNOR OF ONE-FOURTH TO WILLIAM F. CLARK, OF BROOKLYN, NEW YORK.

WINDOW.

936,147.

Specification of Letters Patent.

Patented Oct. 5, 1909.

Application filed October 6, 1908. Serial No. 456,500.

To all whom it may concern:

Be it known that I, HANS MORTENSON, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Window, of which the following is a full, clear, and exact description.

The invention is an improved window, in which either the upper or lower sliding sash may be turned end for end and brought inward in the lower portion of the window frame, where the outside of the sash is easily accessible for washing or other purposes, and a ventilating space between the sashes provided if desired. To this end I construct the sash frame with a parting bead and an inner stop bead, both of which terminate near the middle of the frame, with the parting bead confined to the upper portion of the frame and the inner stop bead confined to the lower portion of the frame, an upper and lower sash slidable within the frame, each having counterbalancing means, with either sash adapted to be swung on the connections with its counterbalancing means and turned end for end and brought against or adjacent to the inner face of the inner stop bead.

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

Figure 1 is an inner face view of a window constructed in accordance with my invention, the same being shown partly in section; Fig. 2 is a vertical sectional view of the window substantially on the line 2—2 of Fig. 1, showing in dotted outline successive positions taken by the lower sash in reversing and bringing it against the inner side of the inner stop bead; Fig. 3 is a section substantially on the line 3—3 of Fig. 1; Fig. 4 is a section similar to Fig. 2, showing the relative positions of the sash in reversing the upper sash and carrying the same to the inside of the lower sash.

The window frame 10 suitable for carrying out my invention, differs from the conventional window frame in that the parting bead 11 and inner stop bead 12 terminate at or near points midway the height of the

frame, with the parting bead 11 arranged at the top and the inner stop bead 12 arranged at the bottom; also the ways in which the upper and lower sashes 13 and 14 respectively travel instead of being located in the same plane, the way in which the upper sash travels is positioned inwardly of the other and in substantially the same plane as the outer faces of the inner stop beads 12, as shown in Fig. 3. From this it follows that the upper sash is narrower than the lower sash and may be moved to the inner side of the lower sash between the inner stop beads. The frame is further provided with short auxiliary inner stop beads 15 located adjacent to the window sill. Both the upper and lower sashes 13 and 14 respectively are provided with the customary counterbalancing weights which have chains or other flexible devices having connections with the sashes approximately midway their height as indicated at 16 and 17 respectively. These connections serve as pivots on which the sashes may be turned end for end, the turning of the upper sash adapted to take place when pulled down to its lowest position in order to escape the parting bead 11, as will be observed from Fig. 4. When the upper sash is completely reversed, the lower edge is engaged against that portion 18 of the inner edge of the inner stop bead 12 extending across the window sill, with the other end of the sash engaging against the bottom rail of the lower sash, which at this time is moved to the top of the window. With the upper sash thus disposed, the normal outer face is easily accessible for washing and other purposes. When access is to be had to the outside of the lower sash or a ventilating space between the two sashes is desired, the lower sash is moved to the top of the window, in which position the upper sash stands, and is then swung outwardly from the top over the upper ends of the inner stop beads, turned end for end and brought down against the inner edges of these beads, and slid to the bottom of the window between them and the auxiliary inner stop beads 15. This position of the lower sash is illustrated in dotted outline in Fig. 2, from which it will be seen that a vertical space is provided between the two sashes, having a width equal to the thickness of the lower sash plus

that of the inner stop bead. A room in this way may be effectively ventilated without exposing the occupants to drafts.

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

The combination of a window frame having a parting bead, an inner stop bead and an auxiliary inner stop bead, and a sash slidable between the parting bead and inner stop

bead in one position and slidable between the inner stop bead and the auxiliary stop bead in an inverted position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HANS MORTENSON.

Witnesses:

W. W. HOLT,

JOHN P. DAVIS.