

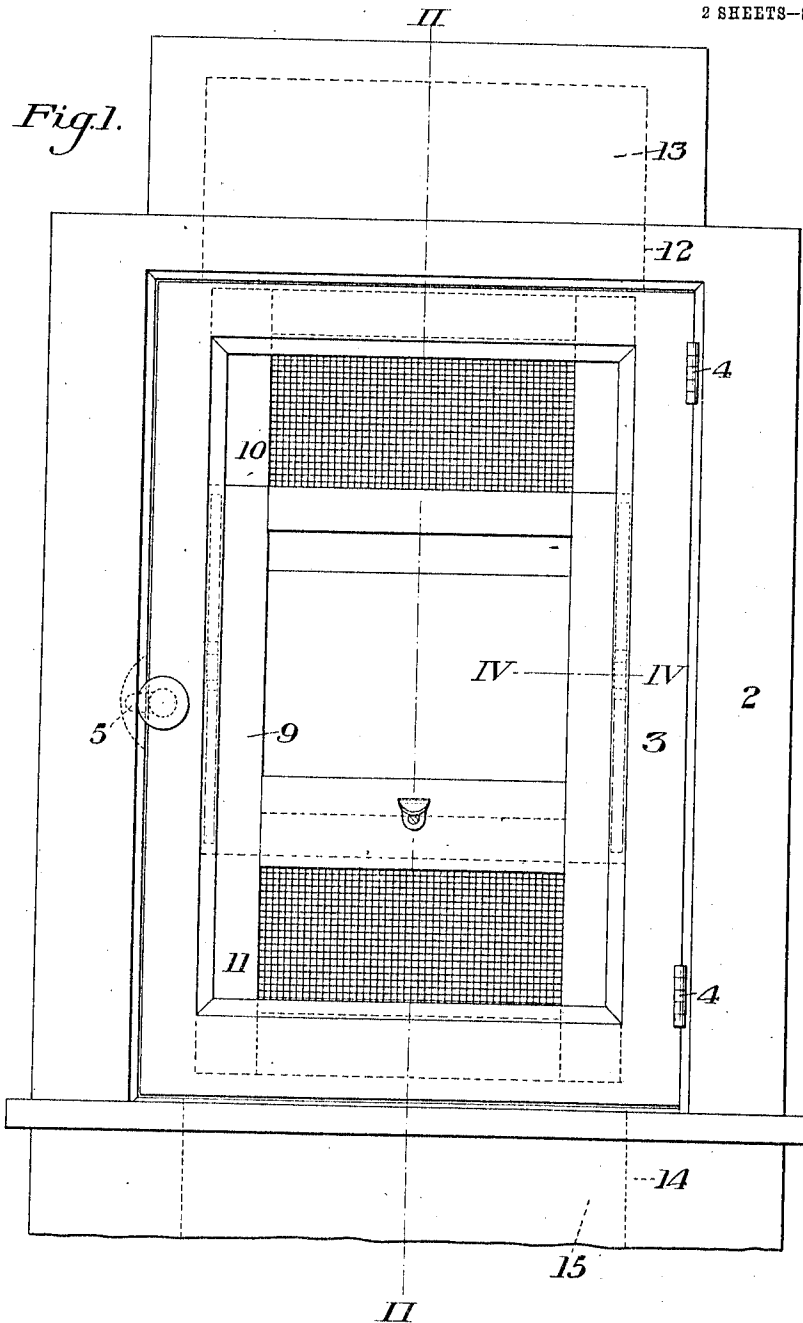
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WINDOW.

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1,039,263.

Patented Sept. 24, 1912.

2 SHEETS—SHEET 1.



WITNESSES

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2 SHEETS—SHEET 2.

Fig. 2.

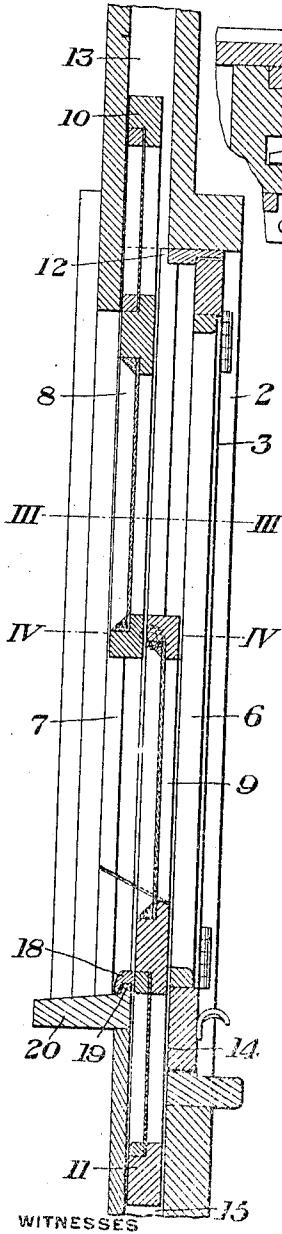


Fig. 3.

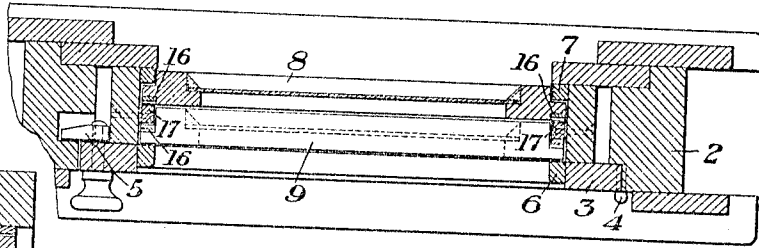


Fig. 4.

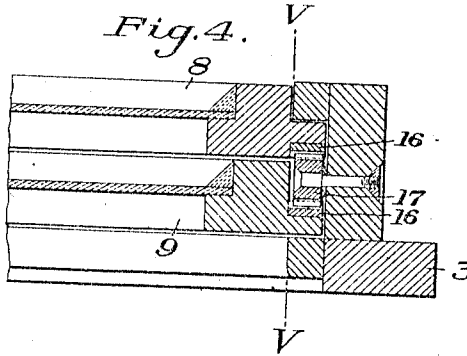
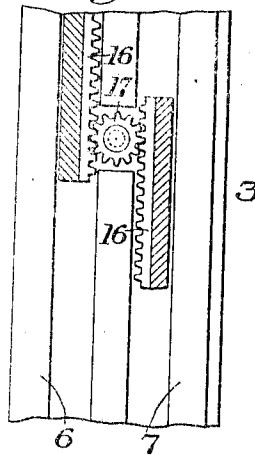


Fig. 5.



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UNITED STATES PATENT OFFICE.

HARRIS M. DAVIS, OF LEETSDALE, PENNSYLVANIA.

WINDOW.

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Specification of Letters Patent.

Patented Sept. 24, 1912.

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To all whom it may concern:

Be it known that I, HARRIS M. DAVIS, of Leetsdale, Allegheny county, Pennsylvania, have invented a new and useful Improvement in Windows, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front view of one form of my improved window showing the sashes in their open positions; Fig. 2 is a vertical section on line II—II of Fig. 1, showing the sashes closed; Fig. 3 is a transverse sectional view on the line III—III of Fig. 2; Fig. 4 is a similar view on the line IV—IV of Figs. 1 and 2; and Fig. 5 is a detail sectional view on the line V—V of Fig. 4.

My invention relates to an improvement in windows, and more particularly to windows in which screens are attached to the sashes so that if either of the sashes is moved to open the window, the attached screen will be brought into position to close the open space previously occupied by the sash.

The object of my invention is to provide a window in which both of the window sashes are slidably mounted in a sash frame which is hinged to the window frame. The top sash is provided with a frame extension at the upper end thereof in which a fly screen is secured, and the lower end of the bottom sash being provided with a similar frame. When the sashes are closed, these screen frames extend into recesses provided therefor in the window frame or building wall, but when either of them is moved to open the window, the fly screen will be drawn into place, so that the whole window is always closed either by means of the sashes or the attached screens.

The precise nature of my invention will be best understood by reference to the accompanying drawings which will now be described; it being premised, however, that various changes can be made in the details of construction and general arrangement of parts without departing from the spirit and scope of my invention as defined in the appended claims.

In the drawings, the numeral 2 designates the main window frame. Hinged to this main frame 2, by means of the hinges 4, is a sash frame 3, which is locked in position by a turning latch 5. This sash frame 3 is

provided with the usual guides 6 and 7, for the top and bottom window sashes 8 and 9, respectively. Formed integrally therewith or connected in any suitable manner to the respective sashes 8 and 9, are the screen frames 10 and 11. The screen 10 projects through an opening 12 in the sash frame 3 into a recess 13, in the main frame 2 and building wall, and the frame 11 extends through an opening 14 in the sash frame 2, into a recess 15 in the window frame and building wall. Secured to adjacent sides of each of the sashes 8 and 9 and on each end thereof are the racks 16, the teeth of which are engaged by pinions 17 mounted between the guides 6 and 7 on each side of the sash frame 3.

Secured to the lower portion of the sash 9, and on the weather side thereof, is a flanged strip 18. When the bottom sash is in its closed or lowered position, this flange lies over a weather bead 19 secured to the outside sill 20.

When the sashes are in the position shown in Fig. 2 the window is closed and the screen frames are entirely hidden from view by the main frame 2, and the hinged frame 3 is locked by the screen frames so that it cannot be swung on its hinges, even though the latch 5 should be open. When it is desired to open the window, the bottom sash is raised, as this will lower the top sash through the medium of the racks 16, and their engaging pinions 17. The two sashes, through the medium of the rack and pinion connections, will counterbalance each other, so that they can readily be moved up and down with very little effort. When the sash frame is to be swung open, as before described, the frames 8 and 9 are moved to their central position, and the screens 10 and 11 will be drawn from the recesses in the main frame and close that portion of the window which has been opened by the movement of the sashes. The swinging sash frame can now be swung inwardly on its hinges, as the screen frames have been entirely withdrawn from the recesses in the main frame and lie wholly within the swinging sash frame.

The advantages of my invention result from the provision of a sash frame hinged to the main frame and provided with guides for the sash frames, which sash frames are provided with integral fly screen frames, arranged to be moved into position to close

the opening in the window when the sashes are opened. Also from the provision of means whereby the hinged sash frame is positively locked in position in the main frame when the window sashes are closed, and also from the means whereby one window sash counterbalances the other.

I claim:—

1. A window, comprising a main frame, an auxiliary frame hinged to the main frame at one side thereof, a plurality of sash guides in the auxiliary frame, the main frame having an upwardly extending guide forming a continuation of the outer guide in the auxiliary frame and also having a downwardly extending guide forming an extension of the inner guide in the auxiliary frame, a sash slidably mounted in the guide and arranged to extend through the auxiliary frame into the main frame when the sashes are closed, a screen secured to each of the sashes in the portion extending into the main frame, the arrangement being such that the sashes can be withdrawn into the auxiliary frame to permit said frame to be swung inwardly on its hinges, the hinges being also so arranged that the sashes can be pushed outwardly through the auxiliary frame when said frame is swung on its hinges, so as to permit the sashes to be

pushed outwardly through the auxiliary frame without engaging any portion of the main frame, substantially as described.

2. A window, comprising a main frame, an auxiliary frame hinged to the main frame at one side thereof, there being a plurality of sash guides in the auxiliary frame, sashes slidably mounted in the guides and arranged to extend through the ends of the auxiliary frame when the sashes are closed, a screen secured to each of the sashes in the portion extending into the main frame, and counterbalancing connections between the sashes and each of the auxiliary frames, said counterbalancing connections being arranged to raise one sash when the other sash is lowered, and the hinge connection being such that the sashes can be pushed outwardly through the auxiliary frame to remove them therefrom without engaging any portion of the main frame when the auxiliary frame is swung on its hinges, substantially as described.

In testimony whereof, I have hereunto set my hand.

HARRIS M. DAVIS.

Witnesses:

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