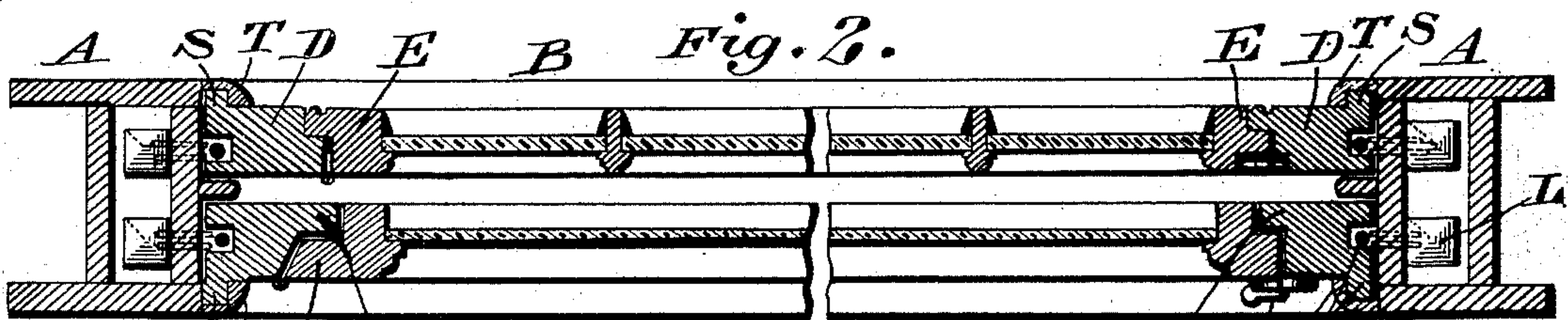
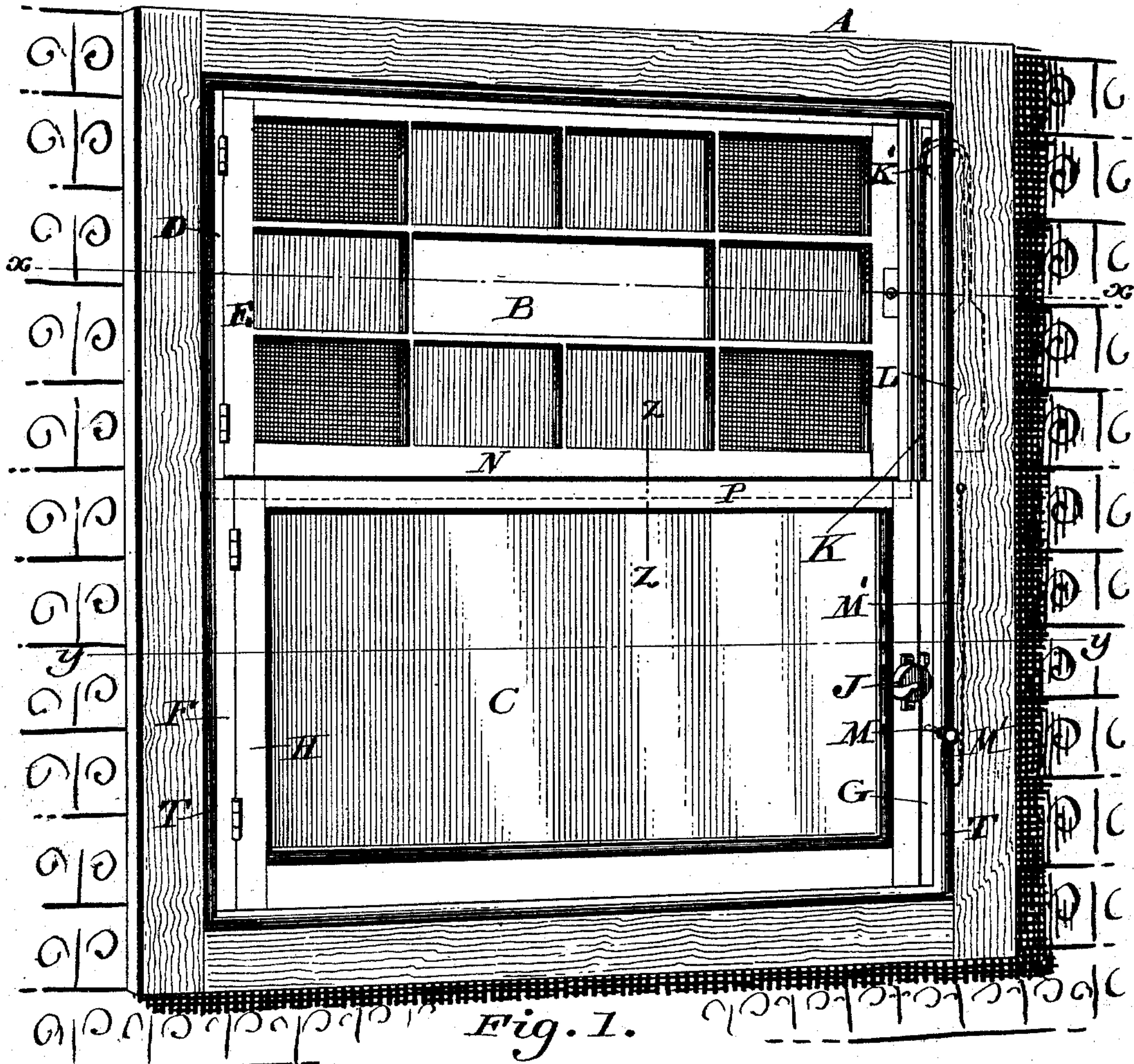


(No Model.)

G. HOERSCH.
REVERSIBLE WINDOW SASH.

No. 483,763.

Patented Oct. 4, 1892.



WITNESSES:
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GOTTLIEB HOERSCH, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
HENRY HOERSCH, OF SAME PLACE.

REVERSIBLE WINDOW-SASH.

SPECIFICATION forming part of Letters Patent No. 483,763, dated October 4, 1892.

Application filed November 9, 1891. Serial No. 411,245. (No model.)

To all whom it may concern:

Be it known that I, GOTTLIEB HOERSCH, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Reversible Window-Sashes, which improvement is fully set forth in the following specification and accompanying drawings.

10 My invention relates to improvements in reversible window-sashes; and it consists, first, of a sash adapted to be swung horizontally as well as raised and lowered.

15 It further consists of a window-sash having a detachable side stile, substantially as described.

It further consists of providing the meeting-rails with projecting or lapping flanges, as described.

20 It further consists of the combination of parts herein set forth.

Figure 1 represents a face view of a window with sashes embodying my invention. Fig. 2 represents sectional views of the two sashes on line *x x* and *y y*, Fig. 1. Fig. 3 represents a sectional view on line *z z*, Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates a window-frame, and B and C the sashes thereof. The upper sash B is formed of an outer frame D, adapted to be raised and lowered in grooves in the window-frame, and an inner frame E, which is hinged to one of the side stiles of the outer frame so as to swing inward, and thus afford easy access to both sides of the same by parties within the apartment, in the wall of which the window is located. The lower sash C is formed of side stiles F and G, vertically movable in grooves in the window-frame, and an inner frame H, which is hinged to the side stile F and has a catch J for securing it when closed to the side stile G. To the said side stile G is secured the cord K, which passes over a pulley K', and has the weight L attached thereto for balancing the sash C.

To prevent the said stile G from being raised by the action of the said weight when it is free from the inner frame H, a pin M is employed, the said pin being inserted in openings in the window-frame and said stile, and is for convenience secured to the window-frame by a chain M'. The meeting-rails N and P of the upper and lower sashes B and C are formed with horizontally-projecting flanges Q and R, which overlap and contact with each other when the said sashes are closed, so as to form a close joint, which is of obvious advantage. It will be seen that when it is desired to raise the lower sash when closed the pin M is removed from the openings, whereupon the sash can be readily raised.

To furnish a strong bearing for the stiles in their movements in the frame A, the same are formed with the flanges S, projecting from their faces and adjacent to and in contact with the window-frame and which are inclosed by the beads T, connected with the said frame A. The ends of the beads abut against the main portion of the stiles, so that the latter are prevented from being displaced from the said beads or from lateral movement in either direction therein, having only a vertical movement.

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

A reversible window-sash consisting of upper and lower sashes, the upper sash being formed of outer and inner frames, the latter being hinged to one of the side stiles of the outer frame, and the lower sash consisting of side stiles and an inner frame hinged to one of said stiles, the meeting-rails of the inner frame of the lower sash and the outer frame of the upper sash having lapping flanges, said parts being combined substantially as described.

GOTTLIEB HOERSCH.

Witnesses:

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