E. F. BOLTE.

WINDOW BLIND AND VENTILATOR.

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1,307,479.

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Fig. 1.

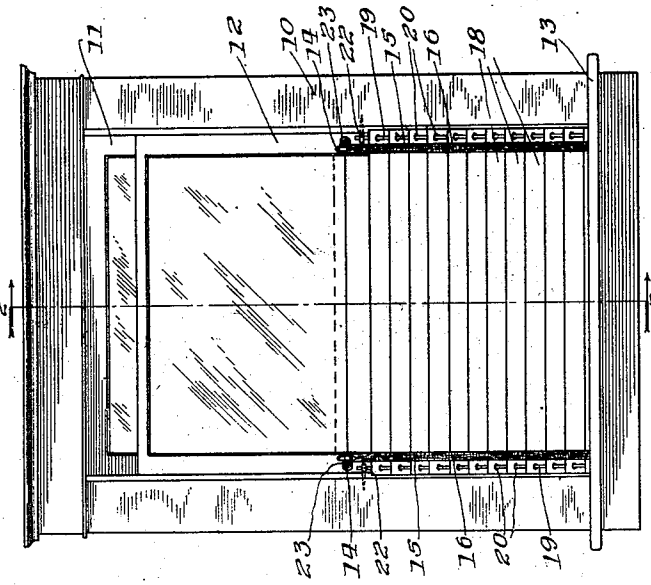


Fig. 4.

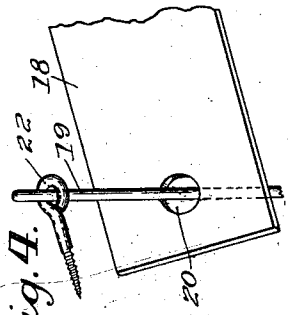


Fig. 2.

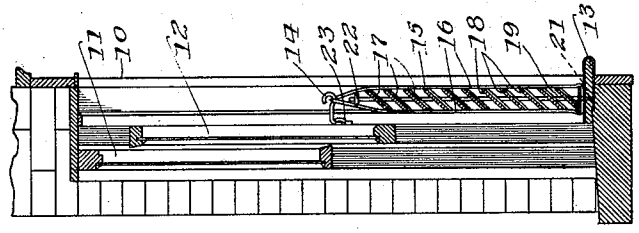


Fig. 5.

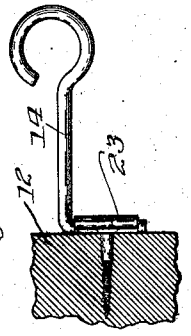


Fig. 3.

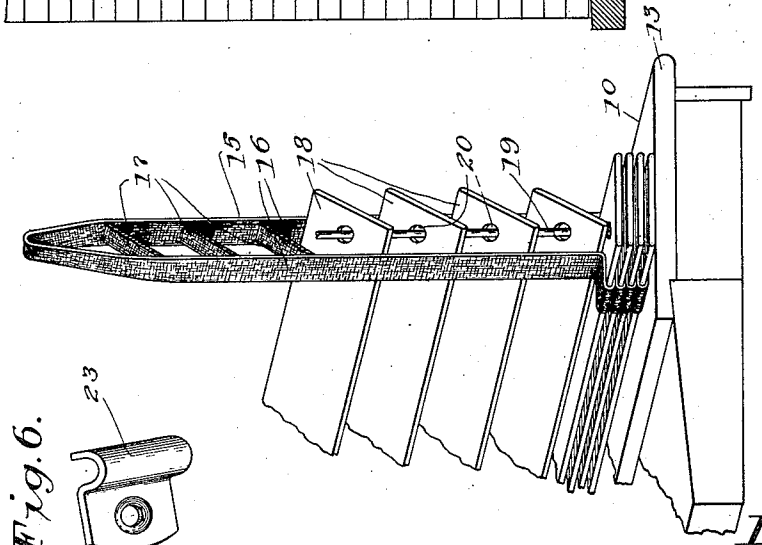


Fig. 6.

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WINDOW BLIND AND VENTILATOR.

1,307,479. Specification of Letters Patent. Patented June 24, 1919.

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To all whom it may concern:

Be it known that I, EDWARD F. BOLTE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Window Blinds and Ventilators, of which the following is a full, clear, and exact specification.

My invention relates to an improved combined blind and ventilator for use in connection with a window.

In congested dwelling districts, especially in apartment or flat buildings, it is usually a difficult matter to obtain proper ventilation in a room without at the same time exposing the occupants to the view of neighbors, or the furniture and finishings to damage by rain.

It is the object of my invention to overcome this difficulty and in attaining this object I have produced an improved combined blind and ventilator which is detachably applied to and coöperates with the lower window sash, and protects the opening between the sash and the window sill whether the sash is opened a short distance or is fully opened. The detachable portion of the blind and ventilator consists essentially of a plurality of thin wooden or metal slats spaced apart upon and supported by flexible ladder-like members of webbing or chains which are suspended from the lower sash preferably on swinging or removable hooks carried thereby.

In the accompanying drawings which illustrate the preferred form of my invention,

Figure 1 is a front elevation of the interior of a window equipped with the combined blind and ventilator;

Fig. 2 is a sectional elevation along the line 2—2 of Fig. 1;

Fig. 3 is a detail perspective view on an enlarged scale, of a portion of the blind and ventilator attachment, showing part of the slats in operative position and part folded upon the window sill, also a portion of a ladder-like member from which slats have been removed;

Fig. 4 is a detail of the guide rod and its support;

Fig. 5 is a detail of the removable and swinging supporting hook; and

Fig. 6 is a perspective of the bracket clamp for said supporting hook.

Referring now to the drawings, the window frame 10 contains the upper sash 11 and the lower sash 12, vertically movable in the frame in the usual manner. Supported upon the window sill 13, when the lower sash is in closed position, is the combined blind and ventilator which will now be described.

Suspended from the hooks 14 upon the sides of the lower portions of the lower sash 12, are the flexible ladder-like members 15, here shown as made of webbing though they may be of chain or similar material. These flexible members are made up of the vertical strips 16 and the cross strips 17. Supported upon the cross strips 17, and preferably firmly attached thereto are the thin wooden or metal slats 18. These slats are prevented from being displaced laterally and are guided in their vertical movement by the guide rods 19 which pass through the relatively large openings 20 in the opposite ends of the slats. The lower end of each of these guide rods projects into a shallow pocket 21 in the window sill, while the upper end of each guide rod is held in position by the screw eye 22 screwed into the window frame or jamb. These guide rods 19 are readily removable from the pockets 21, the openings 20 and the eyes 22 by an upward movement.

From an inspection of Figs. 5 and 6 it will be apparent that the hooks 14 may be detached from their supporting brackets 23, or swung thereon from a position at right angles to the sash to a position parallel to the sash.

By means of my improved blind and ventilator the window sash may be opened to any desired height to admit fresh air without exposing the occupants of the room to the view of neighbors, or to the action of a direct draft. By adjusting the overlapping parallel slats to any desired angle, by sliding the webbing back and forth over hooks 14, the fresh air may be directed upward toward the ceiling and at the same time rain will be prevented from entering the room. When it is desired to use the window in the ordinary manner, the combined blind and ventilator attachment may be removed from the hooks 14 and remain folded upon the window sill. Furthermore, it may be entirely removed from the window and frame without the use of tools and folded into a very small bundle.

Many modifications may be made in the structure herein illustrated and described without departing from the spirit of my in-

vention or its scope as set forth in the following claims.

What I claim as new is:

1. In combination, a window sash capable of movement in a vertical plane, a plurality of flexible members attached thereto and movable vertically therewith, a plurality of slats spaced apart upon and supported by said members to form free and unobstructed ventilating spaces therebetween, and means for adjusting the angle of said slats relative to the plane of the window sash.

2. In combination, a window sash capable of movement in a vertical plane, a plurality of flexible members attached thereto and movable vertically therewith, said flexible members being provided with cross members to form a flexible ladderlike suspension device, and a plurality of slats supported on said cross members and spaced apart in parallel relationship with free open spaces between adjacent slats when the window sash is raised to open position.

3. In combination, a window sash capable of movement in a vertical plane, a plurality of flexible ladderlike members suspended therefrom and movable vertically therewith, a plurality of slats spaced apart upon and supported in parallel relationship by said ladderlike members when the sash is in open position, and readily detachable stationary rigid rods coöperating with said slats to guide them in their vertical movements and to maintain them in proper relative position either in the open or closed positions of the sash.

4. In combination, a window sash capable of movement in a vertical plane, a plurality of flexible members suspended from the lower edge thereof and movable therewith, and a plurality of separate disconnected slats carried by said flexible members at intervals and lying in a compact pile on the window sill when the window sash is closed, and lifted independently one by one from said pile as the sash is raised to open position, thereby filling the open space between the lower edge of the sash and the sill, and returned to said pile one by one as the sash is lowered to closed position.

5. In combination, a window sash capable of movement in a vertical plane, a plurality of flexible members suspended therefrom and movable therewith, a plurality of separate disconnected slats carried by said flexible members at intervals so as to be spaced apart in parallel relationship with free open spaces between adjacent slats when the window sash is in open position, and lying in a compact pile on the window sill when the window is closed, and lifted independently one by one by the upward movement of said flexible members from said pile as the sash is raised into open position and returned to said pile as the sash is lowered to closed position, and readily detachable stationary rigid rods coöperating with said slats to guide them in their vertical movement, and to maintain them in proper relative position either when resting in a compact pile on the window sill or while in spaced relation when the window sash is open.

6. In combination, a window sash capable of movement in a vertical plane, a plurality of flexible members suspended therefrom and movable therewith, a plurality of separate disconnected slats carried by said flexible members at intervals so as to be spaced apart in parallel relationship with free open spaces between adjacent slats when the window sash is in open position, and lying in a compact pile on the window sill when the window is closed, and lifted independently one by one by the upward movement of said flexible members from said pile as the sash is raised into open position and returned to said pile as the sash is lowered to closed position, and means for changing the angle of the slats relative to the plane of the sash when the window is open.

In testimony whereof I affix my signature.

EDWARD F. BOLTE.