No. 872,979. PATENTED DEC. 3, 1907.

M. TOWNSEND.

WINDOW VENTILATOR.

APPLICATION FILED AUG. 28, 1907.

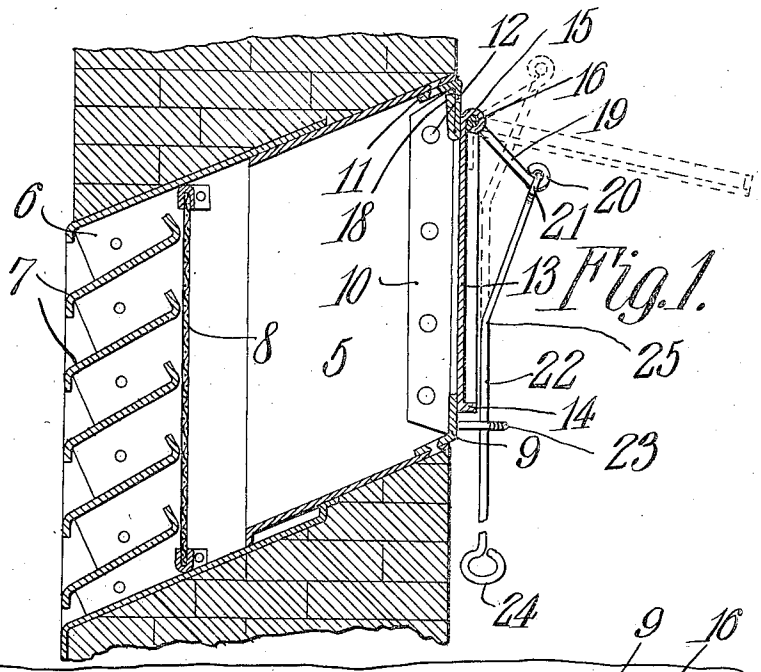


Fig. 1.

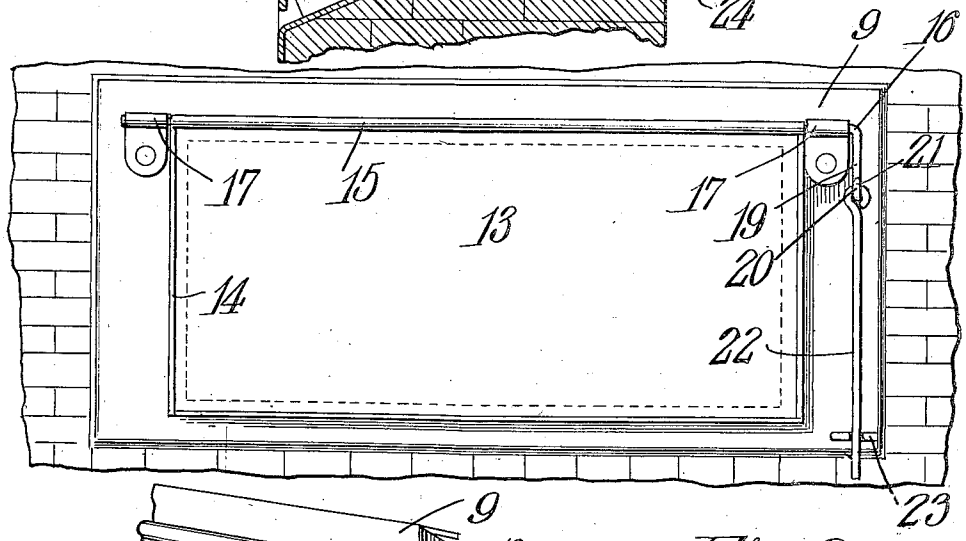


Fig. 2.

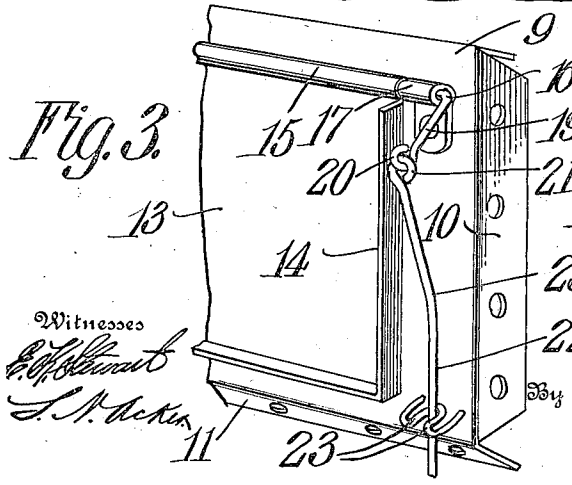


Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

MILES TOWNSEND, OF RIVERSIDE, CALIFORNIA.

WINDOW-VENTILATOR.

No. 872,979. Specification of Letters Patent. Patented Dec. 3, 1907.

Application filed August 28, 1907. Serial No. 390,509.

To all whom it may concern:

Be it known that I, MILES TOWNSEND, a citizen of the United States, residing at Riverside, in the county of Riverside and State of California, have invented a new and useful Window-Ventilator, of which the following is a specification.

This invention relates to ventilators of that general class shown and described in United States Letters Patent issued to me on the 25th day of December 1906 under No. 839231.

The object of the invention is to generally improve and simplify the construction of the ventilator and further to provide the latter with a pivoted door or closure capable of being swung laterally to open position within the room, cellar or other portion of the building.

A further object is to provide means for reinforcing and strengthening the pivoted door and door frame, and means for locking said door in open or partially open position.

A still further object of the invention is to generally improve this class of devices so as to increase their utility, durability and efficiency.

Further objects and advantages will appear in the following description, it being understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claims.

In the accompanying drawings forming a part of this specification: Figure 1 is a vertical sectional view of a portion of a wall equipped with a ventilator constructed in accordance with my invention, the pivoted door or closure being shown in dotted lines in open position. Fig. 2 is a front elevation. Fig. 3 is a perspective view of a portion of the door frame and door detached.

Similar numerals of reference indicate corresponding parts in all of the figures of the drawings.

In the accompanying drawings 5 and 6 indicate inner and outer telescopic members adapted to extend transversely through a wall, partition or similar structure or to be positioned in a window beneath one of the sashes thereof, one of said members being provided with a plurality of spaced storm slats 7 and having a screen 8 extending transversely across the same to prevent the entrance of mosquitos, flies and other insects to the interior of the building. These parts are shown and described in Letters Patent issued to me on December 25, 1906 under No. 839231 and form no part of the present invention, the latter consisting essentially in a door or closure for one of the telescopic members.

The door or closure includes a substantially rectangular frame 9 preferably stamped from a single piece of metal and provided with laterally extending transverse and longitudinal reinforcing flanges 10 and 11 adapted to engage the adjacent interior walls of the tubular member 5 and to which they are rigidly secured by rivets, bolts or similar fastening devices 12.

The frame 9 is provided with an elongated opening normally closed by a pivoted door or closure 13, which latter is also preferably stamped from a single piece of metal and provided with marginal reinforcing flange 14.

The upper longitudinal edge of the metal forming the door or closure 13 is bent to form a longitudinally disposed socket or eye 15 in which is rigidly secured a rod or pin 16, said rod or pin having its opposite ends journaled in suitable bearings 17 secured to the outer face of the door frame on each side of the door opening, as shown.

The metal forming the upper longitudinal edge of the door receiving opening is bent upwardly and pressed laterally into engagement with the interior face of the door frame to form a longitudinal reinforcing strip 18 which serves to prevent the frame from buckling and also serves to reinforce the same at the point of attachment of the pivoted door or closure. One end of the rod 16 is bent to form an angularly disposed arm 19 terminating in an eye 20 for pivotal connection with the corresponding eye 21 of an actuating rod 22.

Secured to the exterior face of the door frame beneath the arm 19 is a clamping device preferably formed of a single piece of wire bent to produce spaced spring clamping arms 23 adapted to receive and engage the actuating rod 22, thereby to lock the pivoted door or closure in open or partially open position. It is to be understood that the clamping arms 23, shown in the drawing as fastened to the frame 9, may be attached to a door or window casing or to the wall of a room, which position is determined by circumstances attending the placing of the ventilator.

One end of the actuating rod 22 is provided

with a terminal handle or finger-piece 24, while the opposite end thereof is bent laterally at 25 so as to force the rod inwardly in parallel relation to the exterior walls of the frame and in position to engage the clamping arms 23. It will thus be seen that by gripping the handle 24 and exerting an upward pressure on said handle, the rod 22 will tilt the arm 19 so as to swing the door laterally to open position within the room, cellar, or other portion of the building, as indicated by dotted lines in Fig. 1 of the drawings.

In order to lock the door in open or partially open position, it is merely necessary to force the rod 22 laterally between the clamping arms 23 when said arms will exert a spring clamping action on the rod and thus prevent accidental movement of the same. A slight lateral pressure on the rod 23 will release said rod from engagement with the clamping arms when the door may be moved to closed position.

Attention is here called to the fact that the arms 23 not only serve to lock the door in adjusted position but also form guides for the rod 22 when operating the door.

While the device is principally designed for use in connection with wall ventilators it is obvious that the same may be used with equally good results as a window ventilator or wherever a device of this character is found desirable or applicable.

Having thus described the invention what is claimed is:

1. A ventilator including a frame having an opening formed therein, a door pivotally mounted on the frame and adapted to close said opening, a crank arm operatively connected with the door, a rod pivotally connected with the crank arm, and spring clamping arms secured to the frame and adapted to engage the rod for locking the door in open or partially open position.

2. A ventilator including a frame having an opening formed therein, clips secured to the exterior walls of the frame on each side of the opening, a door pivotally mounted on the frame, a pin secured to the door and journaled in said clips, one end of the pin being bent laterally beyond the adjacent clip to form a crank arm, a rod pivotally connected with the crank arm, and spring arms adapted to receive and clamp the rod for locking the door in open or partially open position.

3. A ventilator including a frame having an opening formed therein, a door pivotally mounted on one side of the frame at said opening and provided with a marginal reinforcing flange, clips secured to the frame, a pin secured to the door and journaled in said clips, one end of said pin being bent to form a crank arm having a terminal eye, a rod depending from the crank arm and provided with an eye for pivotal engagement with the eye on said crank arm, and a clamping device having spring arms adapted to engage the rod for clamping the door in open or partially open position.

4. A ventilator including a frame stamped from a single piece of metal and having its longitudinal and transverse edges bent laterally to form strengthening flanges, there being an opening formed in the metal between said flanges, clips secured to one face of the frame on each side of the opening, a door pivotally mounted for lateral movement and adapted to normally close the opening in the frame, said door being provided with a marginal reinforcing flange, a pin secured to the door and journaled in the clips, one edge of the metal at the door opening being bent upwardly and pressed laterally in engagement with the rear face of the frame to form a longitudinal reinforcing strip at the rear of the pivot pin, a crank arm formed on one end of the pivot pin, an operating rod pivotally connected with the crank arm, and a clamping device having spring pressed arms adapted to receive the rod for clamping the door in open or partially open position.

5. A ventilator including inner and outer telescopic members, spaced storm slats secured to one of the members, a screen extending transversely of said member and arranged at the rear of the storm slats, a frame secured to the other member and having an opening formed therein, a door pivotally mounted on the exterior of the frame and movable laterally to open position, a crank arm secured to the door, an operating rod pivotally connected with the crank arm, and a clamping device secured to the frame and formed of a single piece of metal bent to produce converging spring clamping arms adapted to engage the rod for locking the door in open and partially open position.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

MILES TOWNSEND.

Witnesses:
WM. T. DINSMORE,
B. F. HOYT.