Nov. 24, 1931. G. G. TOMLINSON 1,833,139

WINDOW CONSTRUCTION

Filed March 31, 1930 2 Sheets-Sheet 1

Fig. 1.

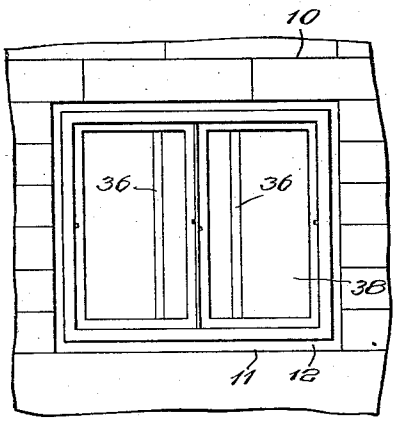


Fig. 2.

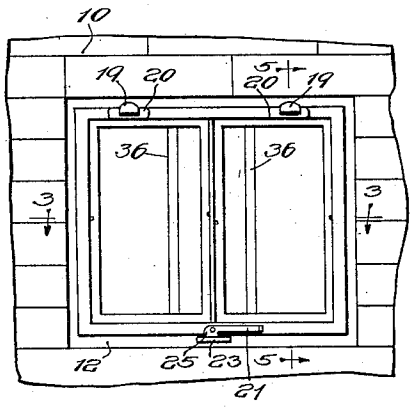


Fig. 3.

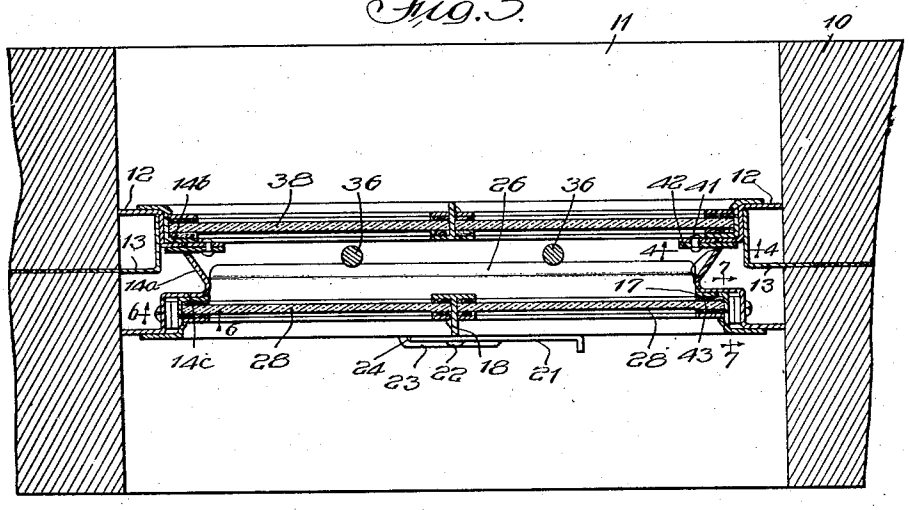
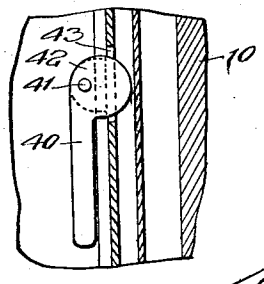


Fig. 4.



Witness:
William R. Kilroy

Inventor:
George G. Tomlinson
Hill & Hill
Attys.

By

Nov. 24, 1931. G. G. TOMLINSON 1,833,139

WINDOW CONSTRUCTION

Filed March 31, 1930 2 Sheets-Sheet 2

Fig. 5.

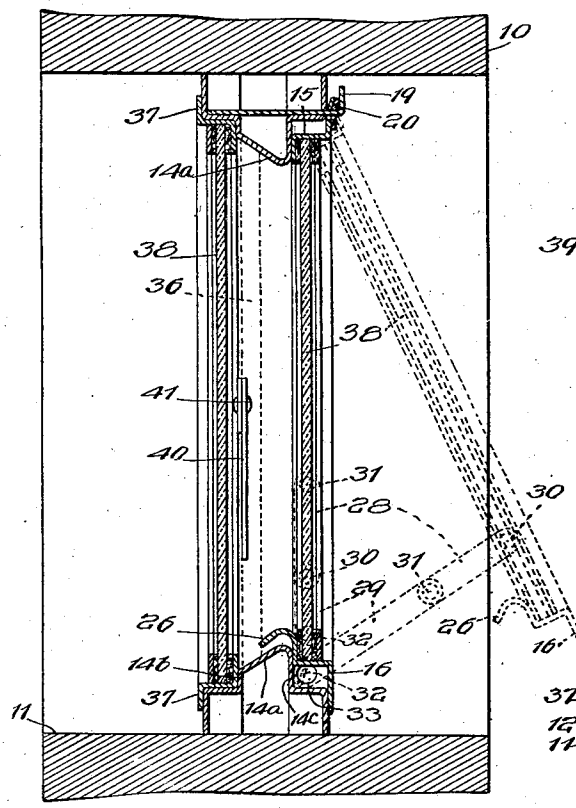


Fig. 8.

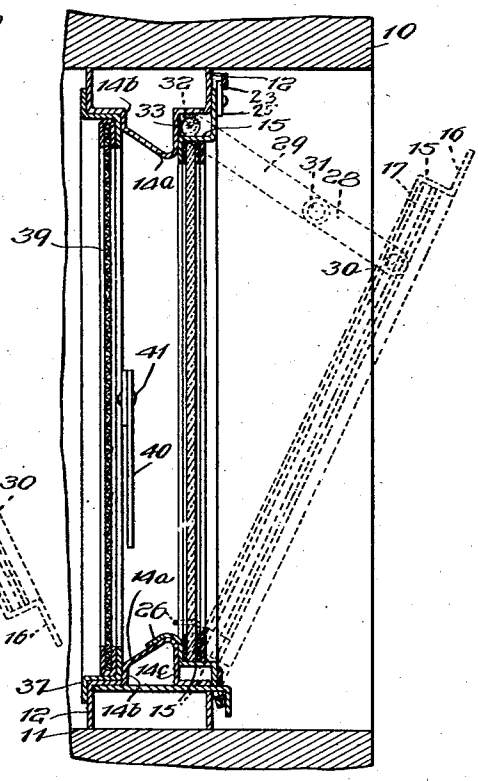


Fig. 6.

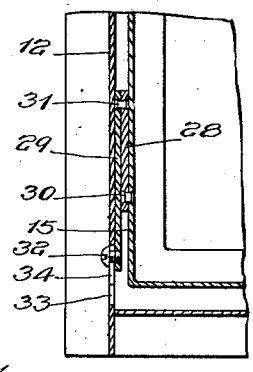
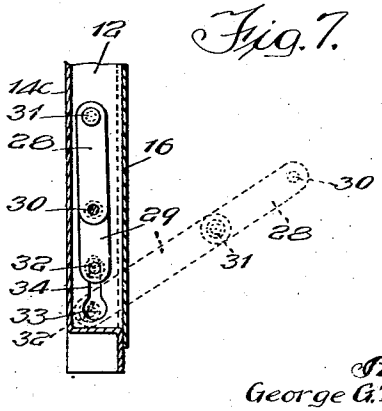


Fig. 7.



Witness:
William P. Kilroy

Inventor:
George G. Tomlinson

By Hill - Hill.
Attys.

Patented Nov. 24, 1931 1,833,139

UNITED STATES PATENT OFFICE

GEORGE G. TOMLINSON, OF KEWANEE, ILLINOIS, ASSIGNOR TO KEWANEE MANUFACTURING COMPANY, OF KEWANEE, ILLINOIS, A CORPORATION OF ILLINOIS

WINDOW CONSTRUCTION

Application filed March 31, 1930. Serial No. 440,273.

The invention relates to windows and more particularly it relates to an improved window construction which may be tilted to a partially open position to secure desired ventilation.

The invention contemplates a window construction which is especially adapted for installation in a basement or the like, where the space does not permit the use of a sliding sash. The necessary ventilation can be secured by tilting the window about one edge as a pivot, the opening being provided with bars or otherwise sufficiently restricted to prevent an intruder from entering through the window and the amount of tilting being so restricted as to substantially prevent a view of the interior of the room from the outside.

An object of the invention is the provision of improved fastening means for a window which permits a limited rotation of the sash about one edge from a closed to a partially open position. The window embodying the device of my invention is also adapted for entire disassembly or for tilting to a completely open position in order that the window opening may be utilized for the storing or removal of bulky articles, such as lumber or the like.

Another object of the invention is the provision of improved fastening means for window construction which is operable as desired to permit the window to be partially opened or by slight manipulation enables the window to be completely opened or entirely dismantled.

The construction shown is equally adapted for use with a window which opens at the bottom or with one which opens at the top; and still another object of the invention is the provision of an improved window construction of the kind described, which is durable, reliable and satisfactory for its intended purpose.

Many other objects and advantages of the construction herein shown and described will be obvious to those skilled in the art from the disclosure herein given.

To this end my invention consists in the novel construction, arrangement and combination of parts herein shown and described, and more particularly pointed out in the claims.

In the drawings, wherein like reference characters indicate like or corresponding parts,

Fig. 1 is an elevational view of the window in closed position looking at the same from the outside;

Fig. 2 is an elevation of the window in closed position looking at the same from the inner side, the device of my invention being applied thereto;

Fig. 3 is a section along the line 3—3 of Fig. 2;

Fig. 4 is a section along the line 4—4 of Fig. 3;

Fig. 5 is a section along the line 5—5 of Fig. 2;

Fig. 6 is a section along the line 6—6 of Fig. 3;

Fig. 7 is a section along the line 7—7 of Fig. 3; and

Fig. 8 is a view of a window showing the invention slightly modified to permit the sash being opened at the top rather than at the bottom.

Referring now more particularly to the drawings, the outer frame or casing of the window is shown as mounted in an opening 11 in a wall 10. The casing comprises an outer frame 12 which has an approximately channel-shaped cross section and extends entirely around the window opening. A pair of vertically extending angle irons 13 are mounted on the ends of the frame 12; each having an outwardly projecting leg 13 partially enclosed by the wall 10.

The frame or casing 12 is preferably made of sheet metal and is equipped for the mounting of an inner tiltable sash and an outer fixed sash thereon. A pair of bars 36 are provided between the two sashes and spaced sufficiently close to prevent entrance through the window. The tiltable sash comprises an outer Z-shaped frame 15 and a vertical T forming a partition 18 on either side of which is mounted a pane of glass 38. The frame or casing 12 has an inwardly projecting offset portion comprising a relatively narrow member 14*b*, a sloping member 14*a*

and a wider member 14*c*. The Z-shaped outer frame 15 is so positioned as to bear against the member 14*c* when the window is closed. A pair of lips 19 projecting from the frame 12, provide a hinged connection for the upper end of the Z-shaped frame 15.

The lips 19 provide a hinged support for the tiltable sash, permitting the same to be swung outwardly at the bottom, as shown in Fig. 5. Two pairs of connected links 28 and 29 limit the tiltable movement of the sash. The link 28 is fastened to the sash near its lower edge by a pivot pin 30. A pivot pin 31 forms a connection between the links 28 and 29 which permits the two links to fold back upon themselves in jack-knife fashion. The free end of the link 29 has a headed member taking the form of a screw bolt 32 mounted therein. The screw bolt 32 projects through a slot 34 terminating in a circular aperture 33 in the frame 12. The relative positions of the links 28 and 29 and of the screw bolt 32 are shown in Fig. 6 when the window is closed and in dotted line position in Fig. 5 when the window is opened the maximum amount permitted by the links. The diameter of the aperture 33 is slightly greater than that of the head of the screw bolt 32 permitting the bolt to be inserted in and removed from the aperture. The links 29 may be detached from the frame 12 by pushing inwardly thereon, and thereby permit the window to be completely opened, if desired. The lower portion of the Z-shaped frame 15 is provided with a curved ledge 26, as shown in Fig. 5 which prevents rain or snow from flowing between the lower edge of the sash and the frame 12. The ledge 26 is shown in spaced relation to the projection 14*a* in order that the ledge may clear the projection when the window is swung from open to closed position and vice versa.

In Fig. 8 I have shown a slightly modified construction wherein the frame 12 has been turned upside down relative to its position in Fig. 5. In this position of the frame 12, the lips 19 are on the lower portion of the window frame and permit the window to open at the top. The curved ledge 26 in Fig. 8 rests upon and tilts about the member 14*a* instead of being spaced apart therefrom, as shown in Fig. 5.

In both embodiments of the invention the window is held in closed position by means of a lever 21 suitably mounted on a pivot pin 22. The lever 21 is provided with an unsymmetrical disk member 25 which is positioned in a socket 24 provided by the member 23. The lever 21 forms a lock when in the position shown in Fig. 2. By rotation of the lever 21, the member 25 is moved to a point where it clears the member 23 and permits the window to be tilted to open position. In both embodiments of the invention, it is necessary to partially dismantle the construction, in order that the window sash be fully opened or removed from the frame 12. This partial dismantling consists in detaching the link 29 as hereinbefore described.

The outer edge of the frame 12 is constructed to receive a fixed sash 37. The sash 37 is shown in Fig. 5 as bearing against the member 14*b* and providing a mounting for glass panes 38. In Fig. 8 the sash 37 provides a mounting for screen sections 39. It is obvious that either the screen sections 39 or the glass panes 38 may be used in either of the constructions, or the sash 37 may be omitted altogether. The sash 37 is held in position by a pair of oppositely positioned levers 40, each having a pivotal mounting 41, by means of which an unsymmetrical disk 42 is turned into and out of operative engagement with a corresponding slot 43 provided in each of the members 14*a*.

Having thus described my invention, it is obvious that various immaterial modifications may be made in the same without departing from the spirit of my invention; hence, I do not wish to be understood as limiting myself to the exact form, construction, arrangement and combination of parts herein shown and described or uses mentioned.

What I claim as new and desire to secure by Letters Patent is:

1. A window comprising an outer casing, a sash mounted in the casing, means providing a hinged connection between one edge of the sash and the casing, links having pivoted connections with the edge of the sash opposite to the hinged connections, and means providing a hinged and sliding connection of said links with the casing, said links being detachable from said hinged and sliding connecting means.

2. A window comprising an outer casing, a sash mounted in the casing, means providing a hinged connection between one edge of the sash and the casing, links having pivoted connections with the edge of the sash opposite to the hinged connections, and means providing a hinged and sliding connection of said links with the casing, the links normally cooperating with said hinged and sliding connecting means to permit the sash to be partially opened.

3. A window comprising an outer casing, a sash mounted in the casing, means providing a hinged connection between one edge of the sash and the casing, links having pivoted connections with the edge of the sash opposite to the hinged connections, and means providing a hinged and sliding connection of said links with the casing, said links normally cooperating with the hinged and sliding connecting means to permit the sash to be partially opened, said hinged and sliding connection permitting the detachment of said links whereby the sash may be entirely opened.

4. A window comprising an outer casing, a

sash mounted in the casing, a hinged connection between one edge of the sash and the casing, a pair of pivotally connected links, one of said links connected to the sash opposite to said hinged connections and the other having a detachable hinged and sliding connection with the casing, said hinged connection operable to permit the removal of said sash only when the links are disconnected from the casing.

5. A window comprising an outer casing, a sash mounted in the casing, means providing a hinged connection between one edge of the sash and the casing, a link having its ends pivotally connected with the sash and frame respectively at points spaced from said hinged edges, means permitting said link to be slidable at one of said pivotal connections, said link being detachable from said slidable and pivotal connection.

6. A window comprising an outer casing, a sash mounted in the casing, means providing a hinged connection between one edge of the sash and the casing, a link having its ends pivotally connected with the sash and frame respectively at points spaced from said hinged edges, means permitting said link to be slidable at one of said pivotal connections, said link normally cooperating with the slidable and pivotal connecting means to permit the sash to be partially opened, said pivotal and sliding connection permitting the detachment of said link whereby the sash may be entirely opened.

In witness whereof, I hereunto subscribe my name this 26th day of March, A. D. 1930.

GEORGE G. TOMLINSON.