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COMFORT WINDOW

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Fig. 2.

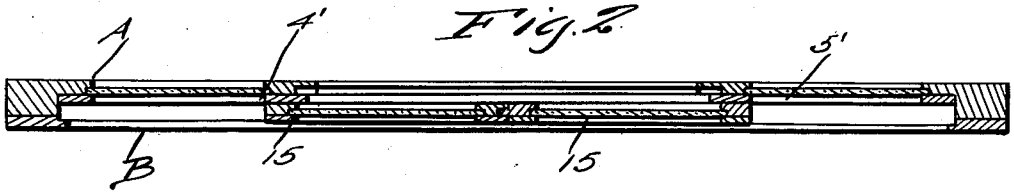


Fig. 3.

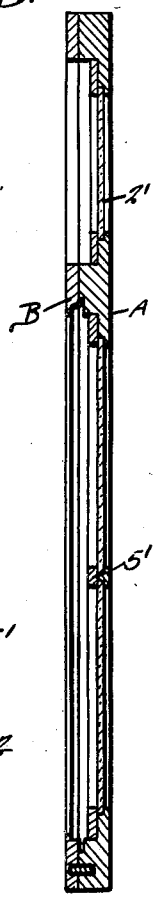


Fig. 1.

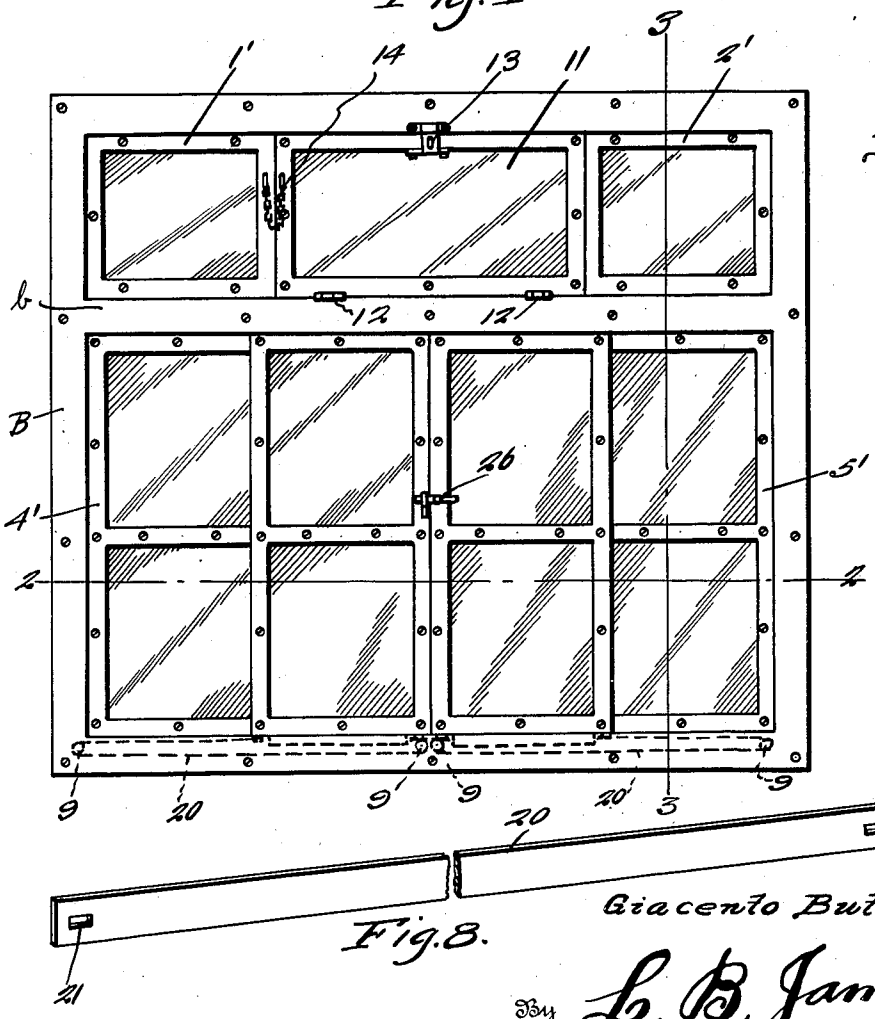


Fig. 8.

Inventor

Giacento Buti

By L. B. James

Attorney

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Fig. 7.

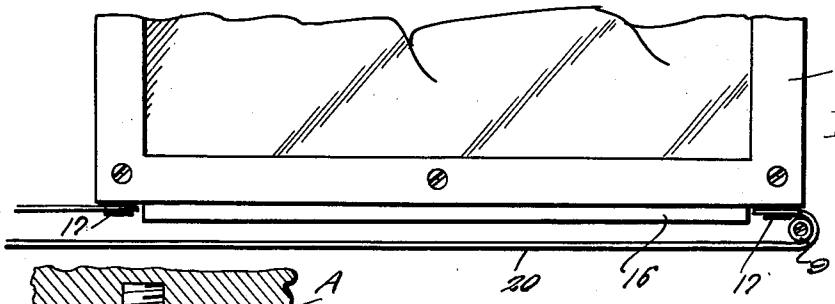
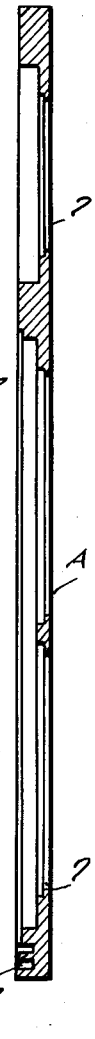


Fig. 5.



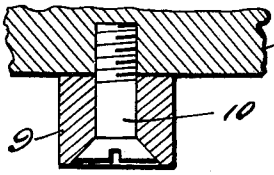
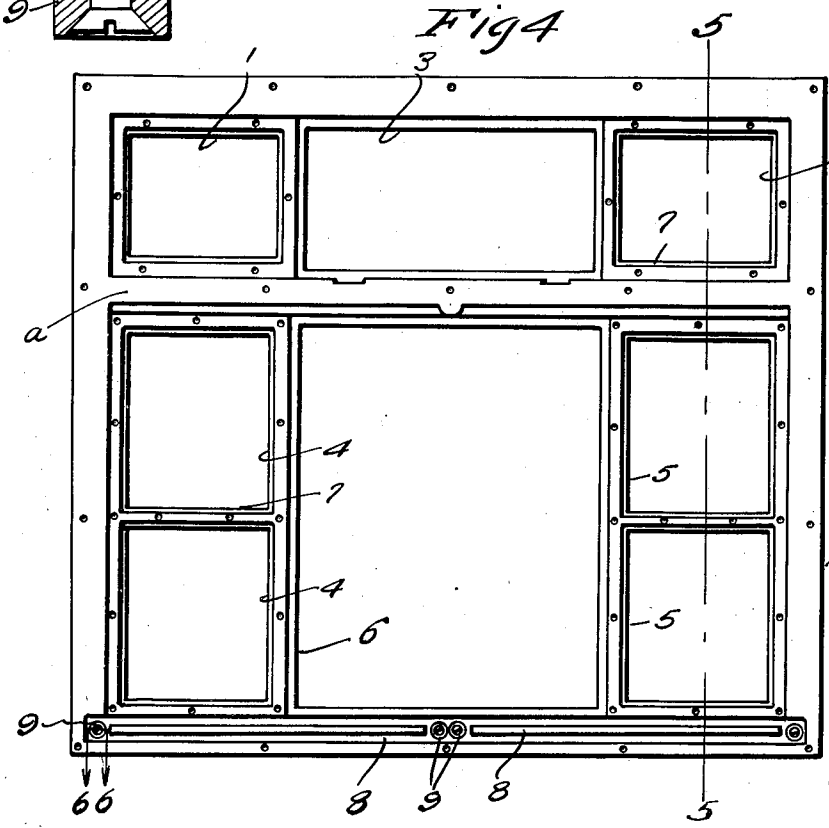


Fig. 6.

Fig 4



Inventor

Giacinto Buti

By L. B. James

Attorney

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Fig. 10.

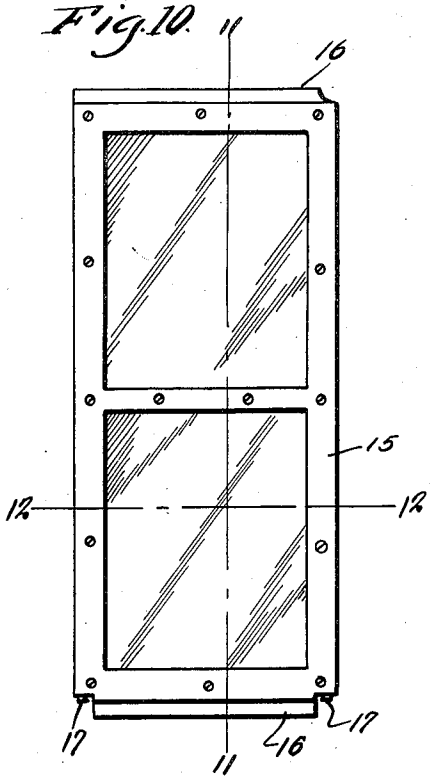


Fig. 11

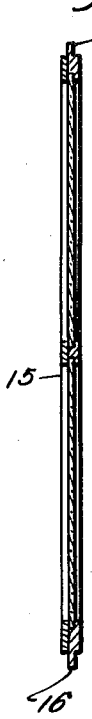


Fig. 9.

Fig. 14.

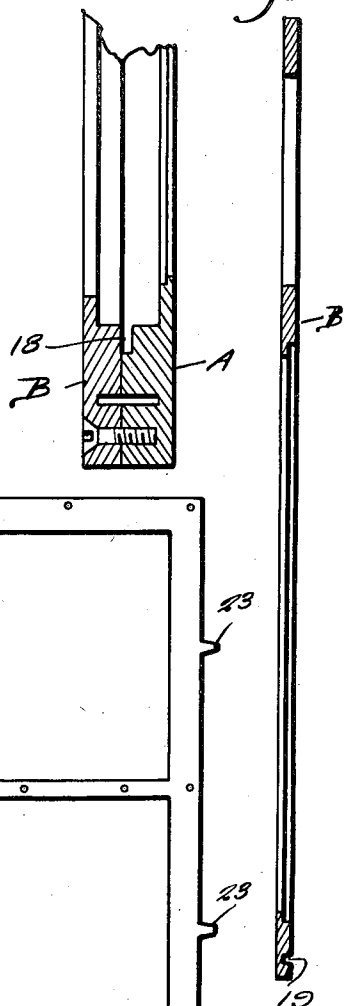


Fig. 12.

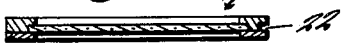


Fig. 13

Fig. 15.

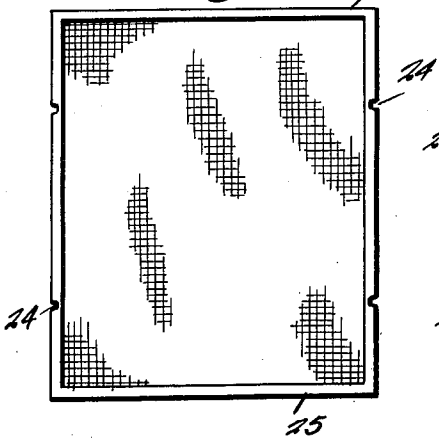


Fig. 16.



Inventor

Giacinto Buti

By L. B. James

Attorney

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UNITED STATES PATENT OFFICE

2,204,923

COMFORT WINDOW

Giacinto Buti, McKeesport, Pa.

Application December 1, 1938, Serial No. 243,459

1 Claim. (Cl. 20—52)

This invention relates to a window construction, the general object of the invention being to provide a structure of great durability, with less upkeep and a neater appearance than windows as now constructed.

Another object of the invention is to provide a frame structure having a plurality of windows therein and a pair of sliding windows located between some of the first mentioned windows, whereby a narrow and compact structure is secured, which may be set deep in a wall, and allowing room for blinds, curtains and drapes and without these items protruding unduly from the wall.

The invention also consists in certain other features of construction, combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claim.

In describing the invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:

Fig. 1 is a face view of the complete window structure.

Fig. 2 is a horizontal section taken along the line 2—2 of Fig. 1.

Fig. 3 is a vertical section taken along the line 3—3 of Fig. 1.

Fig. 4 is an elevation of the back frame.

Fig. 5 is a section on line 5—5 of Fig. 4.

Fig. 6 is a section on line 6—6 of Fig. 4.

Fig. 7 is a fragmentary view of the lower portion of a sliding window and its band.

Fig. 8 is a view of the band.

Fig. 9 is a fragmentary sectional view through a lower part of the invention.

Fig. 10 is a view of one of the sliding windows.

Fig. 11 is a section on the line 11 of Fig. 10.

Fig. 12 is a section on line 12—12 of Fig. 10.

Fig. 13 is a view of one of the front panels for a pair of slide windows.

Fig. 14 is a sectional view through the front frame panel.

Figs. 15 and 16 show a screen that may be used behind the movable windows.

In these drawings, the letter A indicates the back frame and stationary window panel which is formed with the right and left wall upper window openings 1 and 2, between which is located the transom opening 3 and below the openings 1 and 2 are the double window openings 4 and 5, with a large opening 6 between these openings 4 and 5. Each of the openings is provided with the flanges 7, those of the openings 1, 2, 4 and 5 forming seats for glass panes. Horizontal aligned grooves 8 are formed in the lower member of frame A and rollers 9 are placed at the ends of the grooves and are supported on the screws 10. After the panes are placed in the openings 1, 2, 4 and 5, the front panels 1', 2', 4', and 5', are put in place and fastened by countersunk screws, these front panels being flush with the front face of frame A. A transom window 11 is placed in the opening 3 and is provided with the hinges 12 and the latch 13 and a chain 14 is provided for holding the transom window opened to the desired degree.

A pair of sliding windows 15 is provided for closing the opening 6 and, as shown in Figs. 10, 11 and 12, each of these windows include a frame carrying upper and lower panes of glass with means for holding the panes in place and a flange 16 is formed at each end of each window. Hooks 17 are formed at the lower corners of these windows. A large front panel B fits over the frame A and is fastened thereto by countersunk screws, this panel covering the outer members of the frame A and having a cross piece *b* for covering the cross piece *a* of the frame A. When the members A and B are placed together they form the upper and lower grooves 18 for the flanges 16 of the sliding windows 15. The lower member of panel B is formed with the groove 19, which matches the grooves 8 and these grooves 8 and 19 receive the bands 20, see Fig. 8, which pass over the rollers 9 and having their ends engaging the hooks 17 in the sliding windows 15, the bands having holes 21 therein for receiving the hooks. These bands give a smooth, even slide to the windows 15 and cover the lower grooves or tracks on which the windows slide. One window 15 is formed with a groove 22 in its inner side edge to receive a flange on the adjacent side edge of the other window 15 when the windows are closed, these windows 15 moving in front of the windows 4 and 5 when moved to open position. The panels 4' and 5' of these windows 4 and 5 have tongues 23 on their inner side edges to fit in notches 24 in a screen frame 25, see Figs. 15 and 16, this screen covering the opening 6 in rear of the sliding windows 15. A similar screen can be provided for the transom opening. Suitable latches 26 can be provided for the sliding windows to hold them in closed position.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is to be understood that changes may be made in the construction, combination and arrangement of the several parts, provided such changes fall within the scope of the appended claim.

What I claim and desire to protect by Letters Patent is:

A window structure comprising a frame having a window opening therein, a panel secured against said frame, confronting faces of the frame and the panel having registering recesses forming tracks extending across upper and lower ends of the window opening and guide grooves extending longitudinally of the tracks, a window sash slidable in said tracks for movement into and out of closing relation to the window opening, tongues along upper and lower ends of said sashes engaging in said grooves and guiding movements of the sashes, the frame and the panel being formed under the window opening with confronting grooves extending transversely of the window opening in registering relation to each other and communicating with the lower track and the guide groove thereof, rollers carried by said frame adjacent opposite ends of the registering grooves, and a flexible band extending longitudinally in said grooves with its end portions brought upwardly about said rollers into the lower track and secured to the lower end of said sash at opposite sides thereof and adapted to move through the lower track in covering relation to the guide groove thereof.

GIACINTO BUTI.