

July 11, 1932.

T. J. ANDERSON

1,918,010

WINDOW FRAME COMPRISING SLIDABLE SASHES

Filed Nov. 22, 1929

2 Sheets-Sheet 1

Fig. 1

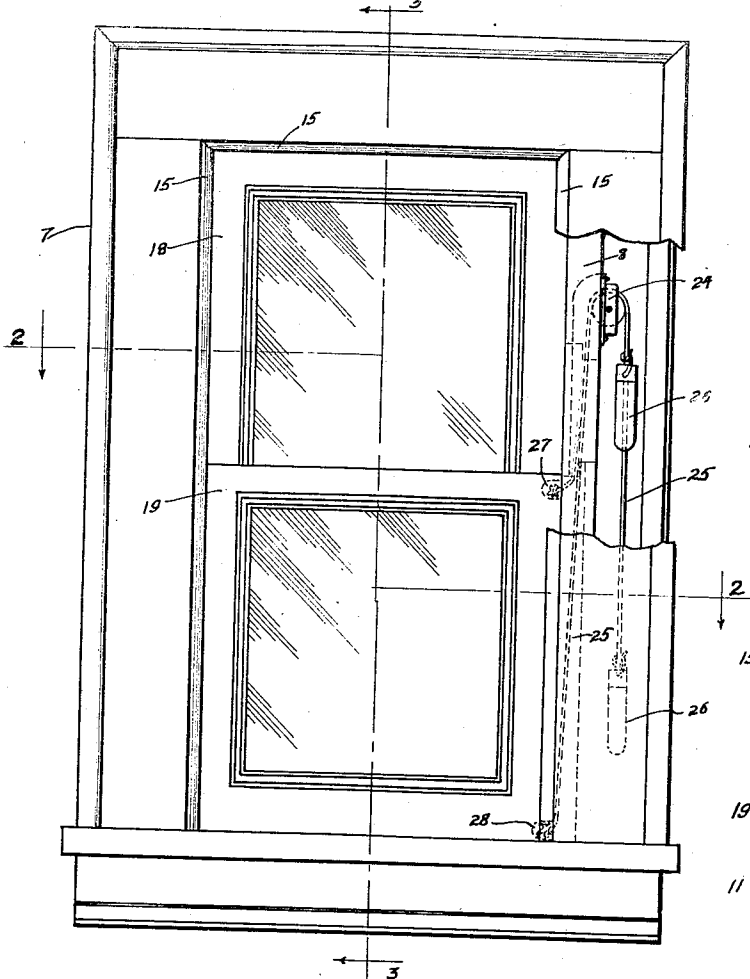


Fig. 3

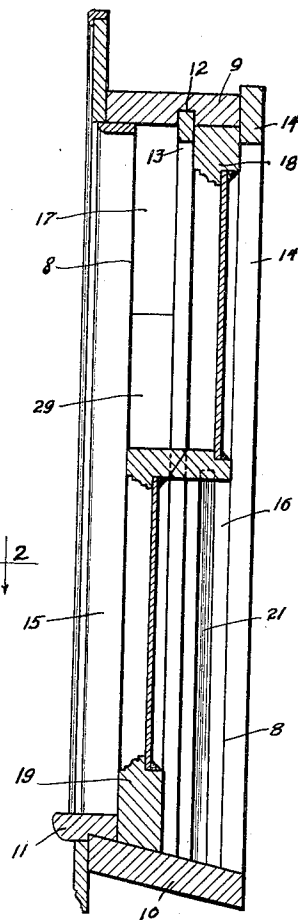
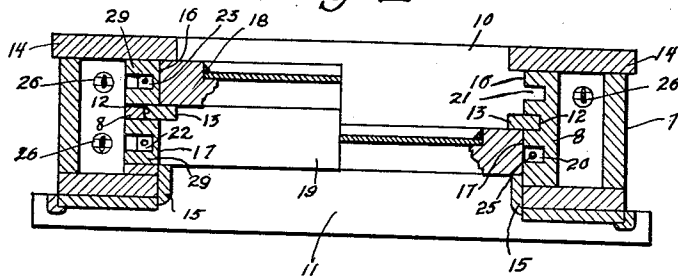


Fig. 2



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2 Sheets-Sheet 2

Fig. 4

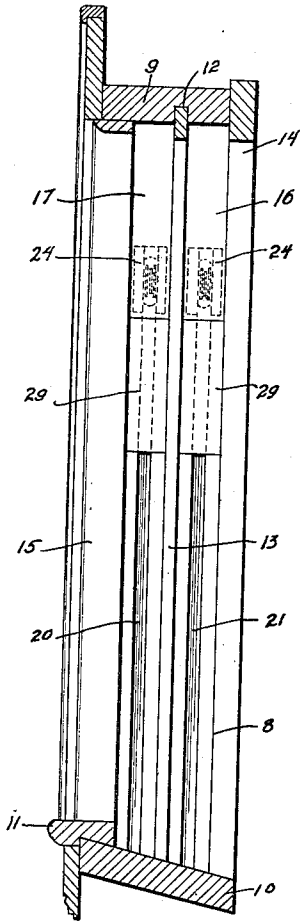


Fig. 5

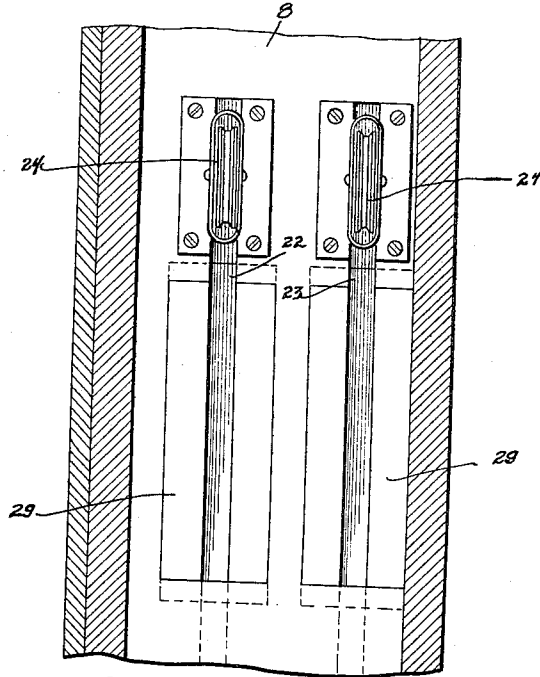
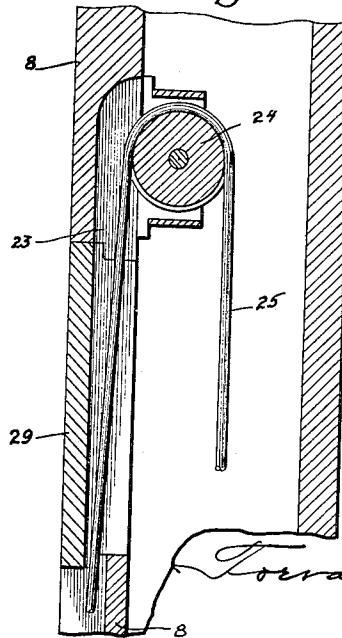


Fig. 6



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WINDOW FRAME COMPRISING SLIDABLE SASHES

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The principal object of the invention is to provide a window frame construction with the sash cords and pulleys concealed in the frame.

5 Another object is to provide a window frame which is neater in appearance, more silent in operation, and more simply constructed.

10 Another object of my invention is to provide an improved window frame construction with an access to the pulleys, counter weights, and to the sash cords traveling in the concealed passages in the frame.

15 Another object of my invention is to provide an access cap or panel for a window frame construction with a passage on the back or inner side thereof for the sash cord, in order that it can be removed and replaced with the sash cord left in its normal position.

20 A feature of the invention is that a window frame has been provided with concealed sash cords in which the sash cords may be connected to the sash and counterweights before placing the weights in the well of the frame.

25 Other features of the invention are that the pulleys and weights can be removed from the frame without disconnecting the sash cords from the sash or weights, and adjustments of the cords may be made or weights exchanged without using special means for holding the sash as they may be lowered to rest on the sill of the frame.

30 Another object of the invention is to provide a window frame in which the sash cords travel invisibly from the face of the stiles over the pulleys which are mounted on the back of the stiles to prevent the sash cords and any parts on the pulleys, that may become loose, from obstructing the upward and downward sliding movement of the sash.

35 Other features and advantages will appear as the specification proceeds.

Figure 1 is an elevational view of a window embodying my invention as viewed from the interior of a room.

50 Figure 2 is a horizontal cross sectional view taken on line 2—2 of Figure 1.

Figure 3 is a vertical sectional view taken on line 3—3 of Figure 1.

Figure 4 is a vertical sectional view of the frame showing the sash cord grooves in the side stiles.

Figure 5 is a fragmentary sectional view of the encased side of the side stile.

Figure 6 is a fragmentary sectional view of the side stile and pulleys.

Referring to the particular construction of my invention illustrated in the accompanying drawings, the window frame 7 comprises two vertical even spaced side stiles 8—8, a top lintel 9, a sill 10, and a stool 11 secured in suitable manner on the sill 10. The side stiles 8—8 and top lintel 9 are provided on the face side thereof intermediate the side edges with longitudinal grooves 12 adapted to receive the parting strips 13. The blind stops 14 and the inner stops 15 fixed to the opposed edges of the frame 7 are spaced equidistant apart from the parting strips 13 to provide outer and inner sash channels 16—17 respectively, to receive the vertically sliding top and bottom sashes 18—19 respectively.

In the inner sash channels 17, the side stiles 8—8 are provided with longitudinal sash cord grooves 20 which extend from the sill 10 to a point adjacent the top of the bottom sash when the bottom sash 19 is in closed position. In the outer sash channels 16, the side stiles 8—8 are likewise provided with longitudinal sash cord grooves 21 which extend from the sill 10 to a point adjacent the bottom of the top sash when the top sash 18 is in closed position. This construction is most clearly illustrated in Figures 3 and 4. The side stiles 8—8 are also provided with enclosed longitudinal passages 22—23 adjoining the tops of grooves 20—21 to form continuous passages for the sash cords 25.

The top and bottom sashes 18—19 are provided with recesses 27—28 adjacent the lower ends of the side rails to receive the knotted ends of the sash cords 25. The remaining ends of the sash cords 25 are connected to the usual counter weights 26.

Referring now to Figures 1, 5 and 6, the side stiles 8—8 are provided on the back side

thereof adjacent the upper ends with sash pulleys 24 on which the sash cords 25 travel.

With the window in its properly assembled condition, the sash cords 25 will be invisible within the well of the frame whether the sashes 18—19 are in open or closed positions.

To afford access to the sash cords, pulleys 24, and counter weights 26, removable caps or panels 29 have been provided beneath the sash pulleys 24 to form access openings or pockets. The removable caps or panels 29 are constructed so as to permit the passage of the sash cords 25 on the enclosed side thereof and may be removed from the side stiles 8—8 and replaced without interfering with the sash cords 25.

While I have illustrated and described a particular construction of my invention, it should be understood that changes may be made in the details thereof without departing from the spirit of the invention, and I do not wish to be limited thereto except as may be pointed out in the appended claims.

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

1. In a window frame construction, side stiles on said frame, longitudinal grooves on the face of said stiles, said grooves extending from a point adjacent the top of the sill on said frame to a point intermediate its ends, said stiles also provided with inner passages adjoining the top of said grooves and extending to a point adjacent the top of said stiles.

2. In a window frame construction, side stiles on said frame, sash pulleys mounted on the inner side adjacent the top of said stiles, longitudinal grooves on the face of said stiles, said grooves extending from a point adjacent the top of the sill on said frame to a point intermediate its ends, said stiles also provided with inner passages adjoining the top of said grooves and extending to a point adjacent the top of said stiles where said pulleys are mounted.

3. In a window frame construction, side stiles on said frame, said stiles are provided on the face side with longitudinal grooves, said grooves extend from a point adjacent the top of the sill on said frame to a point intermediate its ends, said stiles are also provided with inner passages adjoining the top of said grooves, sash pulleys mounted on the inner side adjacent the top of said stiles, top and bottom sash slidably mounted between the side stiles in said frame, a recess adjacent the bottom end of the side rails on said sash, and sash cords connected in said recesses and slidably traveling in said grooves and in the adjoining passages over the pulleys, said cords connected to the weights to counterbalance said sash.

4. In a window frame construction, side stiles on said frame, longitudinal grooves on

the face side of said stiles extending from the lower end of said stiles to a point intermediate its ends, sash pulleys mounted on the back adjacent the top of said stiles, said stiles adapted to cover said mounted sash pulleys to provide a smooth surface on the face of said stiles over said mounted pulleys.

5. In a window frame construction, side stiles on said frame, longitudinal grooves on the face side of said stiles and extending from the lower end of said stiles to a point intermediate its ends, sash pulleys mounted on the back adjacent the top of said stiles, passages adjoining said grooves on said stiles and extending to said pulleys, top and bottom sash slidably mounted between said stiles in said frame, sash cords connected at one end to said sash and to sash weights at the other ends, said stiles adapted to cover said mounted pulleys and the adjoining passages to said pulleys to form a smooth sliding surface on the face of said stiles for the upward and downward movement of the top and bottom sash.

6. In a window frame construction, side stiles on said frame, sash pulleys mounted on the back adjacent the top of said stiles, said stiles provided with removable caps to give access to said pulleys from the face of said stiles on said frame.

7. In a window frame construction, side stiles on said frame, a passage invisible from the face of said stiles extending from a point adjacent the top of said stiles to a point intermediate its ends, sash pulleys mounted on the back of said stiles adjacent the top of said passage, a removable cap on the face of said stiles to give access to said mounted pulleys, top and bottom sash slidably mounted between said stiles on said frame, an opening at the lower end of said passage, sash cord grooves on the face of said stiles extending from said opening to a point adjacent the lower end of said stiles, and sash cords connected near the bottom of said sash and slidably traveling in said grooves and in said passages over the pulleys and connected to weights to counterbalance said sash.

8. In a window frame construction, side stiles on said frames, passages on said stiles invisible from the face of said stiles extending from a point near the top of said stiles to a point intermediate its ends, sash pulleys mounted on said stiles adjacent the top of said passages and invisible from the face of said stiles, an opening at the lower end of said passages, sash cord grooves on the face of said stiles extending from said opening to the sill on said frame, top and bottom sash slidably mounted between said stiles, and sash cords connected near the bottom of said sash and slidably traveling in said grooves and in the adjoining passages and over the pulleys and connected to weights to counterbalance said sash.

9. In a window frame construction, side stiles on said frame, longitudinal grooves in the face of said stiles extending from the sill to a point intermediate the ends of said stiles
5 concealed sash pulleys, access pockets in said stiles extending from the upper ends of said grooves to said pulleys, and panels adapted to cover said access pockets.

10. In a window frame construction, side
10 stiles on said frame, concealed sash pulleys mounted from the back side onto said stiles, longitudinal grooves on the face side therein extending from the sill to a point intermediate its ends, said stiles provided with an
15 access extending from a point adjacent the top of said grooves to a point adjacent the sash pulleys on said stiles, a cap or panel adapted to cover said access on said stiles.

11. In a window comprising opposed side stiles, a lower sash slidably mounted between said stiles, pockets in said stiles above the top of said sash in the lowered position thereof,
70 and grooves in said stiles extending from the lower end thereof to said pockets.

12. In a window comprising opposed side stiles, a lower sash slidably mounted between said stiles, pockets in said stiles above the top of said sash in the lowered position thereof,
75 grooves in said stiles extending from the lower end thereof to said pockets, and removable caps or panels provided with inner longitudinal passages adjoining the upper ends of said
80 grooves.

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