

March 19, 1929.

J. A. ROBERTS

1,705,587

SASH GUIDE

Filed Jan. 26, 1928

2 Sheets-Sheet 1

Fig. 1.

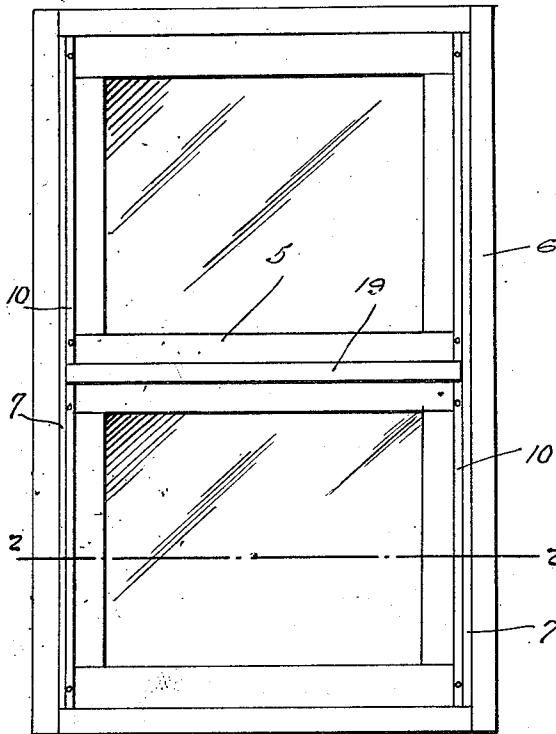


Fig. 4.

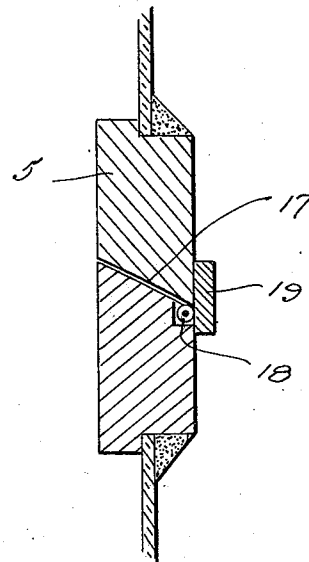
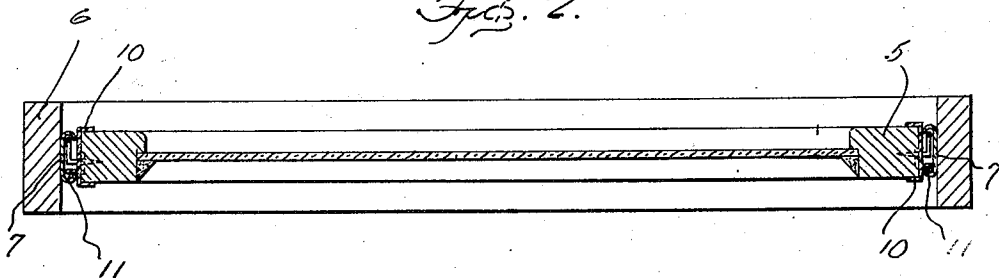


Fig. 2.



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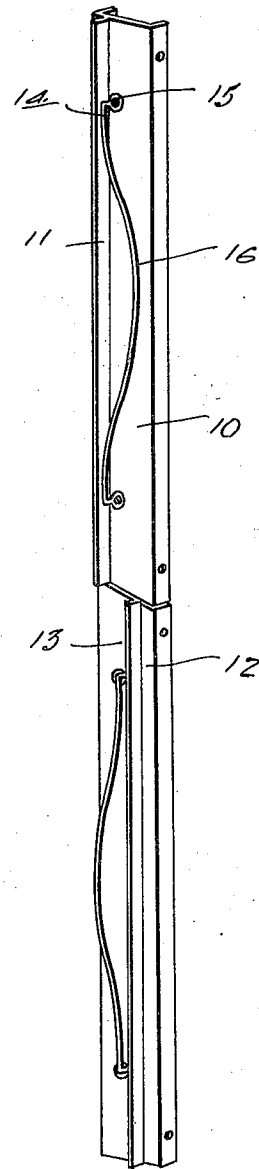
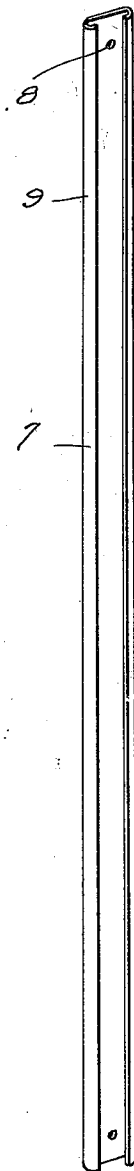
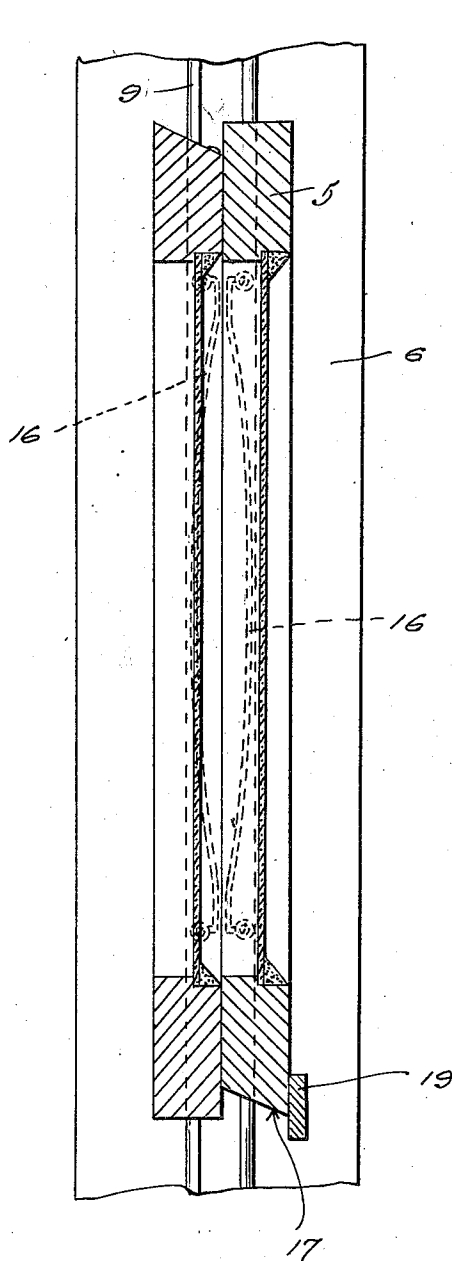
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Fig. 3.

Fig. 5.

Fig. 6.



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UNITED STATES PATENT OFFICE.

JAMES A. ROBERTS, OF WASHINGTON, DISTRICT OF COLUMBIA.

SASH GUIDE.

Application filed January 26, 1928. Serial No. 249,634.

The present invention relates to sash guides for window and screen sash frames slidably mounted show case doors or similarly constructed frame adapted for sliding movement with respect to its associated opening and has for its object to arrange the frame in pairs and disposed, when in closed position, in end to end relation and adapted upon its initial sliding movement to cause a transverse movement of the frame into a position parallel with each other, thus permitting independent sliding movement of either of said frames.

A further object of the invention is to provide a guide for slidably mounted frames of this character of a simple and practical construction, efficient and reliable in performance, neat and attractive in appearance, enabling the associated frames to be disposed in a weather tight condition with respect to each other, inexpensive to manufacture and otherwise well adapted to the purpose for which the same is intended.

Other objects and advantages reside in the special construction and combination of the various elements comprising the invention, reference being had to the accompanying drawings forming a part hereof, wherein:—

Figure 1 is a view in elevation of a frame providing a mounting for a pair of sash members constructed in accordance with my invention,

Figure 2 is a transverse sectional view taken substantially along the line 2—2 of Figure 1,

Figure 3 is a vertical sectional view through the sash members showing the same when disposed in substantially parallel relation,

Figure 4 is a sectional view through the abutting ends of the sash members showing the same disposed in end to end relation,

Figure 5 is a perspective view of the channel shaped guide member, and

Figure 6 is a similar view of the guide plate illustrating the manner in which the same are disposed oppositely with respect to the respective sash members.

Referring now to the drawings in detail, for the purpose of illustration I have illustrated my invention adapted for use in connection with a pair of sash members 5 of a window frame 6, within which frame the sash members are slidably mounted for vertical movement. Along the inner face of each of the uprights of the frame 6 is arranged a channel shaped guide 7, having a suitable number of openings 8 formed in the base

portion thereof by me with which the same is attached to the frame and with the flanged edges 9 of the guide turned slightly inwardly as clearly illustrated in Figure 5 of the drawings.

In the side edges of each of the sash members 5 is secured a plate 10 having a rib 11 formed on its outer face and extending longitudinally throughout the length of the plate. As shown in Figure 6 of the drawings the rib 11 is disposed adjacent one edge of the plate, thus separating the base of the plate into relatively narrow and wide sections designated at 12 and 13 respectively. Upon the wider section of the plate is secured a leaf spring 14 disposed vertically and with its upper and lower end formed into eyes 15 whereby to receive attaching screws for securing the end of the springs in place. The intermediate portion of the spring is bowed as at 16 and extending in a direction away from the rib 11.

The rib 11 formed on the plate and the bowed section 17 of the frame are adapted to be slidably fitted within the panel portion of the guide 7 so that the rib engages one of the flanges of the guide with the bowed section 16 disposed under the opposite flange in frictional engagement therewith. It will thus be apparent that the tension of the bowed portion of the spring 14 will engage the guide in friction gripping relation and retain the sash member in adjusted vertical position with respect to the guide.

As illustrated in Figure 6 of the drawing the rib 11 and spring 14 mounted on the upper and lower sash members are oppositely arranged so that the respective ribs and springs will engage the opposite flanges of the guide.

By providing a guide of continuous formation throughout the height of the frame 6 it will be apparent that the respective sash members 5 may be disposed in end to end relation as indicated in Figure 4 of the drawing, when said sash members are arranged in closed position with respect to the window opening.

The adjacent end of the sash members are beveled as shown at 17, the beveled end of the respective sash members being oppositely formed so as to provide an interfitting of the beveled edges of the sash. Upon one of the sash members is rotatably mounted a pair of rollers 18, said rollers being recessed within the sash with one edge thereof in engagement

with the opposite sash whereby to facilitate lateral sliding movement from the respective sash frame. To the face of one of the sash members may be secured a molding 19 having one end thereof in overlapping relation with the adjacent face of the opposite sash member serving to cover the space between the abutting edges of the same so as to form a weather tight fit therefor. By mounting the sash members in a proper manner within the frame 6 it will be apparent that upon the movement of one of the sash members in a direction toward the opposite sash member, that the beveled abutting edges thereof will cause the said members to slide past each other into a substantially parallel position as illustrated in Figure 3. The movement of the sash frame into such position causes an equal tension to be placed upon the spring 14 so that each sash is frictionally retained in position in the guide 7. The tension of this spring is sufficient to cause the respective sash members to frictionally adhere to each other so that upon the movement of one of the members the other will likewise be similarly moved.

However when desired either of the sash members may be moved independent of the other. While I have illustrated my invention adapted for use in connection with window frames it is obvious that the same is equally well adapted for use in connection with the main frame, sliding door frame of show cases or in connection with frame members of any character where the same are mounted in pairs for sliding movement.

It is obvious that the invention is susceptible of various changes and modifications, without departing from the spirit or scope of the invention or sacrificing any of its advantages, and I accordingly claim all such forms of the device to which I am entitled.

Having thus described my invention, what I claim as new is:

1. In a sash guide comprising a channel shaped guide member, a pair of sash members normally disposed in end to end relation and having their abutting edges beveled, a guide plate arranged at the side edges of each of said members cooperating with the guide member for the movement of the sash members longitudinally with respect to the guide and means carried by said plate, engageable with the guide permitting limited

transverse movement of the sash with respect to the guide whereby to enable said sash members to be arranged in parallel relation with respect to each other.

2. In a sash guide, a channel shaped guide member, a pair of sash members normally arranged in end to end relation and having their abutting edges beveled, means carried at the beveled edge of one of said members whereby to facilitate the transverse sliding movement between said beveled edges, guide plates arranged at the side edges of each of said members, a longitudinally extending rib formed on the outer face of each of said plates and disposed adjacent one edge thereof and dividing the surface of the plate into relatively small and large sections, with the relative position of said sections on the plate of the respective sash members being operatively disposed and a spring member secured to the largest section of each of said plates and slidably retained in said guide and yieldably permitting limited transverse movement of the respective sash member with respect to the guide whereby to enable relative sliding movement therebetween.

3. In a sash guide, a channel shaped guide member, a pair of sash members normally arranged in end to end relation and having their abutting edges beveled, means carried at the beveled edge of one of said members whereby to facilitate the transverse sliding movement between said beveled edges, guide plates arranged at the side edges of each of said members, a longitudinally extending rib formed on the outer face of each of said plates and disposed adjacent one edge thereof and dividing the surface of the plate into relatively small and large sections, with the relative position of said sections on the plate of the respective sash members being operatively disposed and a spring member secured to the largest section of each of said plates and slidably retained in said guide and yieldably permitting limited transverse movement of the respective sash member with respect to the guide, said spring member operating to tensionally retain the sash members in friction gripping relation with each other for sliding movement as a unit.

In testimony whereof I affix my signature.

JAMES A. ROBERTS.