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## REMOVABLE WINDOW SASH

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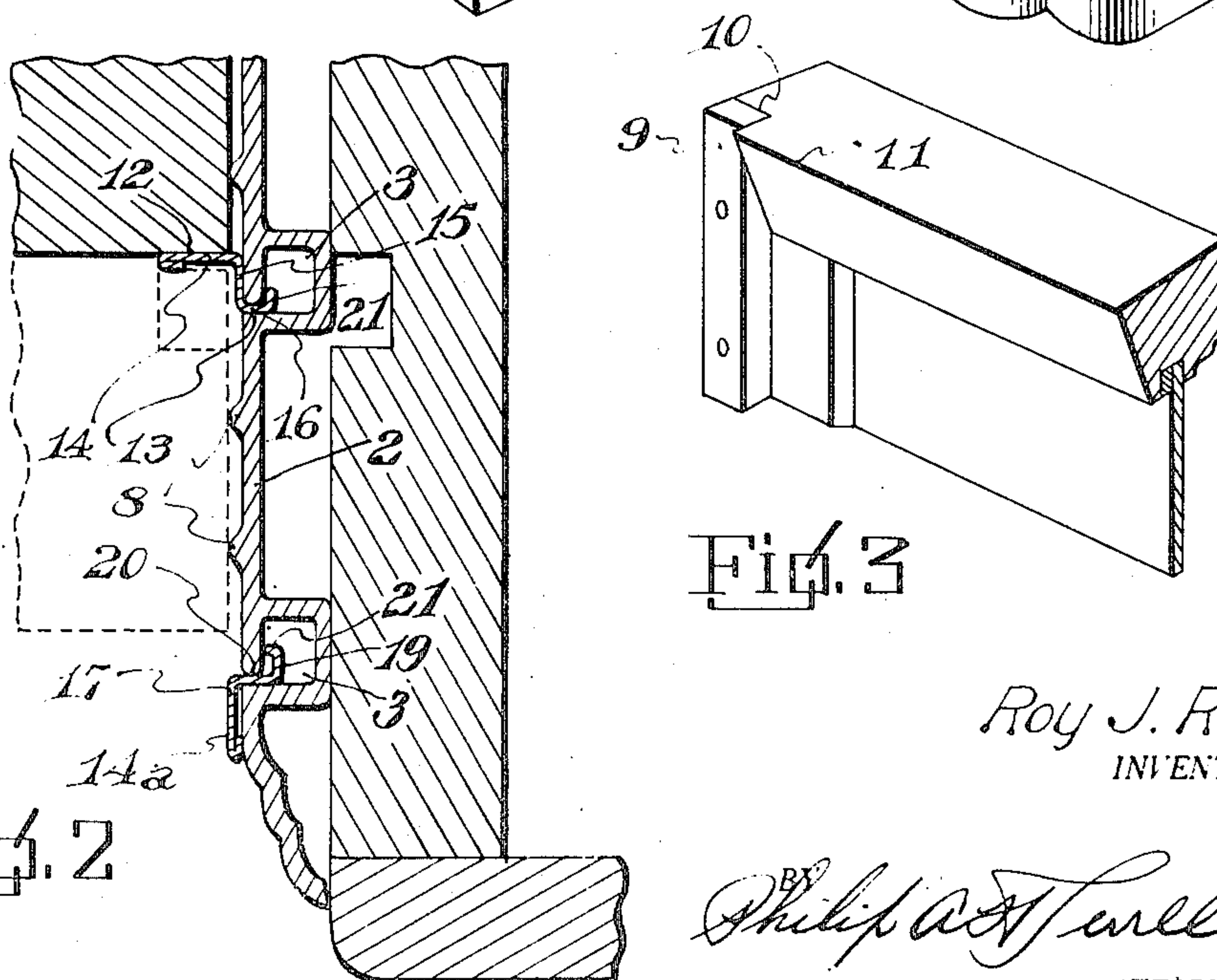
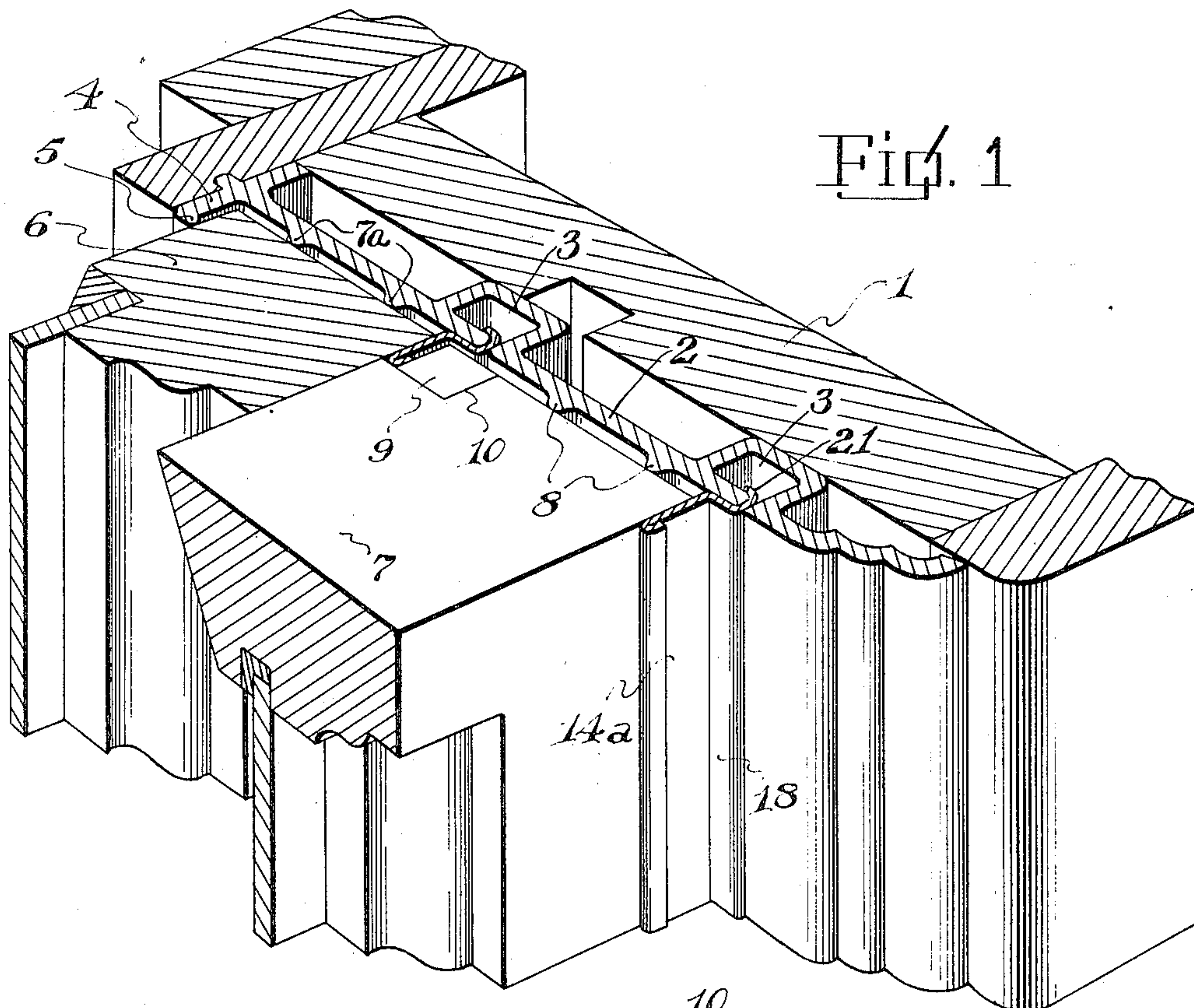


Fig. 3

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## REMOVABLE WINDOW SASH

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4 Claims. (Cl. 20—12)

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The invention relates to removable window sash and mountings therefor, and has for its object to provide a device of this kind having hingedly mounted inside and parting strips, which may be moved out of the path of the sash, thereby allowing the lower and upper sash to be successively removed from the window frame for cleaning or repair purposes.

A further object is to form the inside and parting strip substantially Z-shaped in horizontal cross section, and having one of their arms cooperating with the sash, and their other arms or flanges extending through vertical slots in a window frame facing and terminating in a vertical chamber in said facing and adapted to be hingedly moved on the slots as hinging points until the sash engaging flanges are close to and in parallel relation with the facing member and out of the path of the sash.

A further object is to provide the facing member with spaced vertical ribs engaging the sides of the sash for spacing the sash from the facing member a distance equal to or greater than the width of the flanges of the strips, that is the thickness of the flanges that engage the sash.

A further object is to provide a filler strip on the outer side of the inside sash for filling the groove into which the old conventional parting strip extended.

With the above and other objects in view the invention resides in the combination and arrangement of parts as hereinafter set forth, shown in the drawing, described and claimed, it being understood that changes in the precise embodiment of the invention may be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawing:

Figure 1 is a horizontal sectional view through one side of the window frame, immediately above the upper end of the lower sash, showing the parts in perspective.

Figure 2 is a horizontal sectional view through one side of the window frame, showing the inside strip hingedly moved to a position where it will clear the lower sash when removed.

Figure 3 is a detail perspective view of the upper outer corner of the lower sash showing the filler strip for filling the groove into which the old removed parting strip extended.

Referring to the drawing, the numeral 1 designates one side of a conventional window frame, from which the inside strip and the parting strip has been removed. Secured to the window frame, in any suitable manner, is a vertically dis-

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posed facing member, preferably formed from extruded aluminum. It is to be understood that such a facing member will be placed on each side of the frame, however for purposes of illustration one is shown.

The metallic facing member 2 is in spaced relation to the frame side 1, and provided with offset vertical chambered members 3, the purpose of which will presently appear.

The outer edge of the facing member 2 is provided with an outside stop flange 4 having a vertical rib 5 engaging the outer side of the outside sash or upper sash 6. The main body of the facing member 2 is provided with vertical ribs 7<sup>a</sup>, which engage the side of the upper sash, thereby spacing the sides of the sash from the main body of the facing 2. It will be noted that the lower sash 7 is also spaced from the lower body 2 by vertical ribs 8, thereby reducing the frictional engagement, and at the same time providing a space between the sash and the facing member 2, the purpose of which will presently appear.

After the strips have been removed as above set forth, a filler strip 9 is secured to the outer side of the lower sash to close the channel 10, into which the old parting strip extended, and to space both sash from each other. It will be noted that the filler strip 9 is so proportioned that its outer face is spaced inwardly from the upper horizontal edge 11 of the lower sash. The parting strip 12 is substantially Z-shaped, as shown in Figure 2, and has its flanges 13 and 14 in parallel planes and connected by a right angle portion 15, adapted to engage the outer side of the facing member 2 adjacent the vertical slot 16 in the facing plate with the arm 13 extending into the chambered member 3. When in this position, the flange 14 is interposed between the upper and lower sash, as shown in Figure 1.

The inside strip is of similar shape as the strip 12 and its flange 14<sup>a</sup> is adapted to engage the inner side of the lower sash 7 as shown in Figure 1 with its body 18 in engagement with the outer side of the facing member 2, and its flange 19 extending through the slot 20 of the facing member into the chambered member 3.

When it is desired to remove the sash for wiping or repair purposes, an instrument is inserted between the flange 14<sup>a</sup> and the lower sash 7, and the flange 14<sup>a</sup> is pried outwardly until the body 18 springs into the channeled member 3 and the flange 14<sup>a</sup> into engagement with the facing member 2 as shown in Figure 2, so the lower sash can be removed from the frame. It will be noted that the ribs 8 space the sash from the facing



member 2 a sufficient distance so the sash will clear the flange 14a during the removal operation. Following the removal of the lower sash, the parting strip 12 is similarly hinged to the position shown for the outside strip and then the upper sash can be removed. When replacing the sash, the operation is reversed.

Flanges 13 and 19 are preferably provided with right angle stop flanges 21 for stiffening the flanges 13 and 19 and also for limiting the movement of the device. It will be noted that the bodies 15 and 18, when sprung to open position, rotate into the slots 16 and 19, hence, after the spring action, they will be frictionally held in vertical slots, until again sprung to operated positions.

From the above it will be seen that a sash mounting assembly is provided, which is simple in construction, and one which may be easily and quickly applied to window frames now in use without materially modifying the construction, as it will only be necessary to remove the inside and parting strips, fill the parting strip channel in the lower sash and plane opposite sides of the sash for gaining additional space.

The invention having been set forth what is claimed as new and useful is:

1. The combination with a window frame, of a sash mounting therefor, said sash mounting comprising a face plate carried by the window frame side in spaced relation thereto, vertically chambered outwardly off-set members carried by the face plate and extending towards the window frame side into engagement with the frame side, said face plate having narrow vertical channels in communication with the interior of the vertical chambered members, and Z-shaped parting and inside strips having one of their flanges engaging the inner faces of the upper and lower

sash and the outside face of the lower sash, the other flanges of said Z-shaped strip extending through the narrow vertical channels and into the chambers of the vertically chambered members at points inwardly spaced from the inner faces of the upper and lower sash, said parting and inside strips being hingedly and slidably movable in the vertical slots for insertion of the strips into the channels and positioning the strips out of the path of the sash when the sash are removed from the window frame.

2. A device as set forth in claim 1 wherein the flanges of the parting and inside strips are in parallel planes, and the inner ends of said flanges connected together by a right angled body portion in engagement with the window frame.

3. A device as set forth in claim 1 wherein the chambers of the vertically chambered members are rectangularly shaped and the outer edges of the strip flanges extending into the vertical chambered members are provided with angularly disposed stop flanges.

4. A device as set forth in claim 1 including vertically disposed spacer ribs carried by the facing plate and engaging the sides of the sash, said ribs being of a depth greater than the thickness of the sash engaging portions of the strips thereby allowing the sash to clear the strips when the strips are in opened position.

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