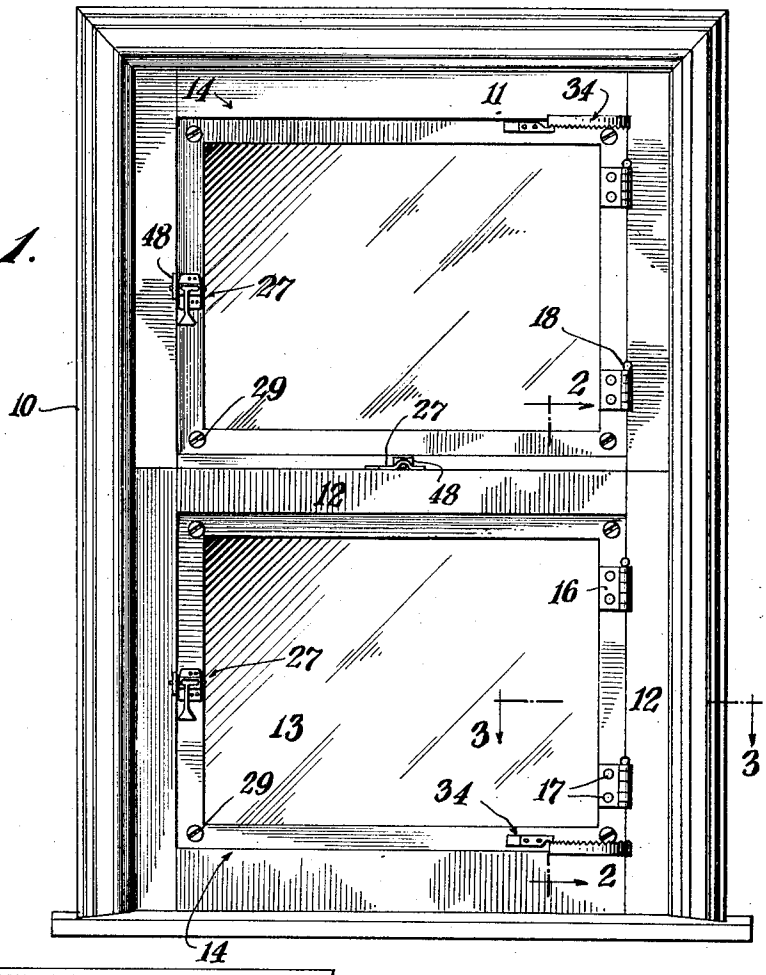
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WINDOW SASH

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Fig. 1.



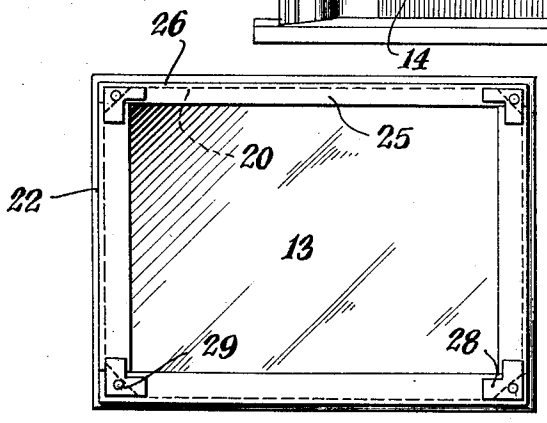


Fig. 4.

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Fig. 2.

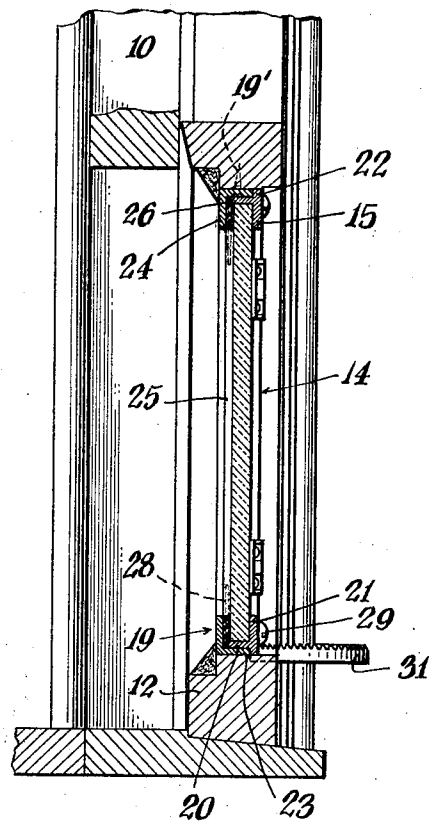


Fig. 5.

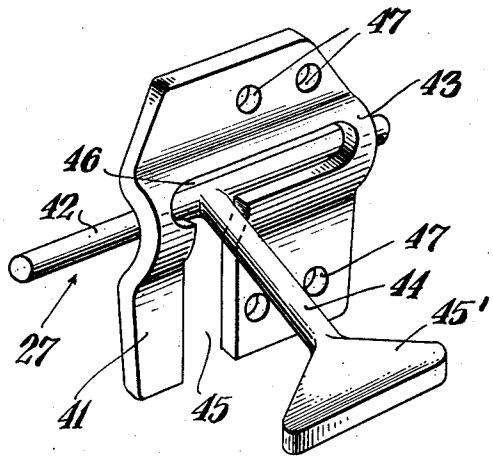


Fig. 3

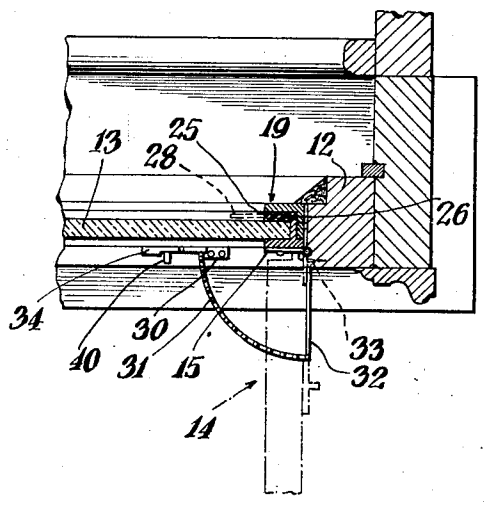
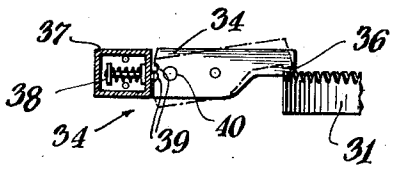


Fig. 6.



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Patented May 26, 1931 1,807,507

UNITED STATES PATENT OFFICE

RALPH CAIAZZO, OF BROOKLYN, NEW YORK, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO AMERICAN NEW FASHION SILVERWARE CORPORATION, OF BROOKLYN, NEW YORK, A CORPORATION OF NEW YORK

WINDOW SASH

Application filed September 21, 1929. Serial No. 394,252.

This invention relates to window sashes and has particular reference to swingably openable sashes.

As it has heretofore been necessary prior to cleaning the outer surface of the glass of a window to slide the same vertically in order to allow the person about to clean the glass to perform the cleaning operation from the outer slide, one of the objects of this invention is to provide an inwardly swingable member for carrying the glass, so that both sides of the window may be safely cleaned while the cleaner remains inside the building.

Another object of the invention is the provision of interchangeable window members for carrying glass panels, so that the inconvenience and loss of time sustained by the personnel of commercial and other buildings, during periods of inclement weather when it has been necessary for a window cleaner to retain windows in an open condition for prolonged periods, may be removed. An extra, clean window section may therefore be carried to replace a soiled or damaged section, while the latter is being cleaned or repaired.

A further object of the invention is to provide, for a window, having fixed and openable sections, both of which are partly exposed to the elements, an interposed strip of resilient material in connection with one of the sections, so that a weather proof closure may be effected on closing the openable section.

Other objects and advantages of the invention will be hereinafter specifically pointed out, or will become apparent, as the specification proceeds.

With the above indicated objects in view, the invention resides in certain novel constructions and combinations and arrangements of parts, clearly described in the following specification and fully illustrated in the accompanying drawings, which latter show an embodiment of the invention as at present preferred.

Figure 1 is a front elevational view of a window having the present invention incorporated therein.

Figure 2 is a vertical sectional view on the line 2—2 of Figure 1.

Figure 3 is a horizontal sectional view on the line 3—3 of Figure 1.

Figure 4 is a rear plan view of a frame carrying a glass panel therein.

Figure 5 is a perspective view of a locking bolt.

Figure 6 is an elevational view of a retaining latch, partly sectional.

Referring particularly to the drawings by reference characters, the numeral 10 designates a window casing, in which a pair of sections 11 and 12 are slidably mounted, counterweights, pulleys and flexible supporting elements, not shown, being provided.

As the construction of the sections 11 and 12 are similar, a description of one is equally applicable to the other. In order to render both sides of the glass panel 13 easily accessible, I provide a swingable member 14, to the front metal frame 15 of which two of the retaining plates or hinges 16 are attached as by rivets 17, while the other two plates of said hinges, secured in mating relation with the first mentioned plates by removable pins 18, are similarly held rigid with a fixed frame or receiver 19 of angle metal, which is attached as at 19′ to the outer boundary frame of the section 12, said latter frame being preferably of wood.

The frame 15, the respective top, bottom and lateral members of which are metallically joined at the corners, is substantially T-shaped in cross section, there being a web 20 and a flange 21 against the inner surfaces of which the outer edges of the panel 13 find a seat; and a restricted flange 22 extending outwardly as far as the outer surface of the receiver 19, while the inner surface of one flange 23 of the receiver fits loosely against the outer surface of said web. In order to seal the joint between the frame of the section 12 and the receiver, a filling of putty 19′ or the like is provided.

Disposed between the panel 13 and the flange 24 of the receiver 19 is a resilient gasket or member 25, preferably of soft rubber, while a flange 26 of said gasket extends outwardly over the edge of the web

20, thereby forming a thoroughly watertight and airtight joint when the member 14 is closed, there being a lock bolt 27, to be hereinafter referred to, which maintains the required pressure between the member 14 and section 12. The gasket 25 may consist of four sections, which rest in mutual engagement at the corners of the frame 14, and which are held in place by clamping plates 28, each of which is provided with a tapped hole to receive the terminal of a screw 29. While said plates are countersunk in the rubber, the corners of the glass panel are cut away to accommodate said screws.

Slidable vertically on certain occasions, the sections 11 and 12, which are rigid against fore and aft movement, are also held rigid against slidable movement by another bolt 27. In order to adjustably retain the member 14 in any selected location, between the closed and open positions, the latter position being indicated in dot and dash lines in Figure 3, I provide latch mechanism which includes, terminally attached at 30, an arcuate toothed arm 31, a continuation 32 of which is attached at 33, these attachments being on the section 12, while a dog or member 34 is pivoted at 35 on the frame 15.

Said latter member is provided at one end thereof with a detent tooth 36, which engages with any selected tooth of the arm 31. A housing 37 carries a spring pressed pin 38, a hemispherical or rounded end of which engages in one of two apertures 39 in the opposite end of the pivoted member. It will therefore be seen that, on movement of the pivoted member, as by its handle or pin 40, the tooth 36 is held either engaged with or clear of the teeth of the arm 31, the disengaged position being indicated in dot and dash lines in Figure 6. On the window section 11, I prefer to mount the latch mechanism 34 at the top of the swingable member 14. This latch mechanism may be taken as representing any suitable means for performing the same function.

The lock bolt 27 hereinbefore referred to includes a base plate 41 which, to accommodate a slidable rod 42 is transversely cambered at 43. This rod, has preferably formed therewith, an arm 44, which carries a manipulating terminal 45′, and as the cambered portion 43 and lower end of the plate 41 have communicating transverse and longitudinal slots 45 and 46 therein, said rod, the base of which is movable in the transverse slot for locking or unlocking the device, is engageable in the slot 46 for holding the device in the locked position. In said latter position the arm 44 lies flush with the plate 41 and finds a seat on any supporting structure on which the base plate is mounted, there being apertures 47 in the plate for receiving fastening elements. To receive the terminal of the rod 42 a keeper plate 48 is provided.

While the frame section 12 is constructed to receive the metal frame 19, a swingable member 14 may be mounted in an existing window, the slidable frame of the latter being altered to receive a metal frame; like that shown at 19, on which to mount a swingable member 14; and, although a single member 14 is shown in the frame 12, two or more members may, of course, be mounted in one supporting frame.

The hereinbefore described construction admits of considerable modifications without departing from the invention; therefore, I do not wish to be limited to the precise arrangements shown and described, which are, as aforesaid, by way of illustration merely. In other words, the scope of protection contemplated is to be taken solely from the appended claim, interpreted as broadly as is consistent with the prior art.

What I claim is:—

In a window construction, a casing, sections slidably mounted in said casing a frame of angle metal for each section and being fixedly secured therein, a movable metal frame for each section and cooperating with the fixed frames, the movable metal frames being hingedly secured to the sections, latching means for said movable metal frames and holding the same at various angles with respect to the fixed frames, transparent panels for the movable frames, a gasket for each panel and surrounding the same, clamping plates for holding the gaskets against the panels, securing means passing through the movable frames, gaskets and clamping plates respectively for securing the panels to said movable frames, said movable frames being substantially T-shape in cross section to provide webs engageable with the outer edges of the panels and fixed frames respectively, flanges engageable with a side of the panels, restricted flanges formed with the flanges first mentioned and receiving one of the angle portions of the fixed frames when the movable frames are disposed in closed position, and means for fastening the movable frames accordingly.

In testimony whereof I hereby affix my signature.

RALPH CAIAZZO.