

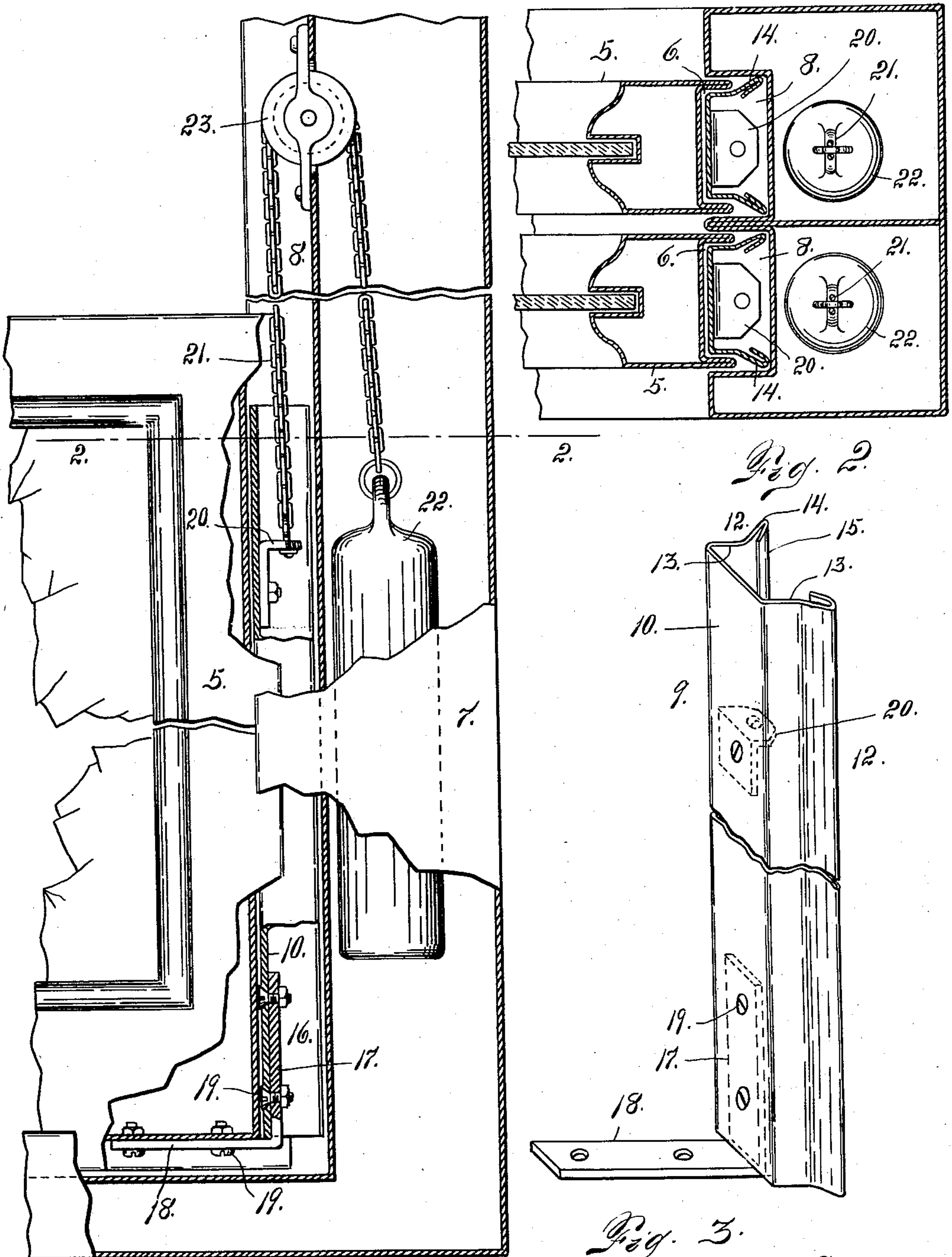
No. 855,359.

PATENTED MAY 28, 1907.

F. D. SWANEY.

REMOVABLE GUIDE FOR METAL WINDOW SASH.

APPLICATION FILED JULY 27, 1906.



Witnesses
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Fig. 1.

Fig. 2.
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UNITED STATES PATENT OFFICE.

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REMOVABLE GUIDE FOR METAL WINDOW-SASH.

No. 855,359.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FLETCHER D. SWANEY, a citizen of the United States, residing at the city and county of Denver and State of Colorado, have invented certain new and useful Improvements in Removable Guides for Metal Window-Sash; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in metal window sash and the improvement consists in providing the sash with a removable guide adapted to engage the groove of the frame preferably of metal. This guide is so connected with the sash that it is capable of being readily removed and drawn downwardly below the sash, whereby the latter may be moved laterally sufficiently to detach the sash from the frame.

An important object of the invention therefore is, to provide a window sash capable of being readily detached or removed from the frame.

Having briefly outlined my improved construction, I will proceed to describe the same in detail reference being made to the accompanying drawing in which is illustrated an embodiment thereof.

In this drawing, Figure 1 is a fragmentary view of a window sash provided with my improvement, the sash being also shown in connection with a metal window frame. Fig. 2 is a horizontal section taken on the line 2—2 of Fig. 1 looking downwardly. Fig. 3 is a detail view in perspective of the removable guide for the sash.

The same reference characters indicate the same parts in all the views.

Let the numeral 5 designate the metal sash of a window. This sash is preferably formed of sheet metal and bent or pressed at its vertical longitudinal edges to form channels or grooves 6. The metal window frame 7 is provided with vertical grooves 8. To each side of the metal sash is applied a guide 9 preferably formed of sheet metal and shaped to enter both the groove of the sash and a

groove of the frame. These guides are formed preferably in cross section of the shape best illustrated in Figs. 2 and 3 and therefore consist of a flat part 10 engaging the bottom of the groove in the sash; and outwardly protruding side portions 12 having parts 13 extending at right angles to the part 10, the parts 13 merging into outwardly flaring parts 14 which terminate in inwardly bent lips 15. These sides of each guide 9 may fit as closely as desired within the groove 8 of the frame. It is evident that the sides 12 have more or less elasticity or resilience thus making it practicable for the guides to fit closely in the grooves of the frame. Each guide is provided at its lower extremity with an angle clip 16 composed of a vertical part 17 and a horizontal part 18 occupying positions at right angles to each other. These parts 17 and 18 are connected by means of screws 19 with the horizontal bars of the sash, whereby they may be readily detached when it is desired to remove the sash from the frame. Each guide 9 is also provided with a small bracket 20 to which may be connected one extremity of the flexible device 21 whose outer extremity is connected with the sash weight 22, the said flexible device passing over a pulley 23 mounted upon the frame in the ordinary manner.

When it is desired to remove either sash from the frame, it is only necessary to detach the guides at the opposite sides of the sash, and pull the guides downwardly below the sash, in which event the sash will be free to move out of the grooves of the frame as will be readily understood. When it is desired to remove the lower sash from the frame, it is evident that the said sash must be raised in order to give access to the screws 19, and also in order to permit the guides to be drawn downwardly below the sash after they are detached.

Having thus described my invention, what I claim is:

1. A window sash provided with a detachable guide adapted to enter the groove of the frame, said guide having outwardly flared portions with inwardly bent lips.

2. A metal window sash provided with a removable guide, the guide being connected with one extremity of the sash whereby it is conveniently accessible for purposes of

removal, said guide having outwardly flared side portions adapted to enter the grooves of the window frame.

3. A window sash provided with vertical
5 grooves, and guides removably connected with the opposite sides of the sash and engaging the grooves thereof but protruding therefrom whereby they are adapted to enter the grooves of the frame, said guides
10 having outwardly flared side parts with inwardly bent lips.

4. A metal window sash, in combination with a removable guide applied to the side rail of the sash and adapted to enter the
15 groove of the frame, the said guides having outwardly flared side portions with inwardly bent lips.

5. A metal window sash provided with a removable guide engaging the side rail of the
20 sash and having outwardly projecting sides provided with outwardly flared portions with inwardly bent lips adapted to enter the grooves of a window frame.

6. A window sash provided with remov-

able guides connected with its side rails and
25 adapted to enter the grooves of the frame, but which when detached shall permit the removal of the sash from the frame, said guides having outwardly flared portions, with inwardly bent lips. 30

7. A metal window sash whose side rails are provided with outwardly flared side parts with inwardly bent lips adapted to enter the grooves of the window frame.

8. A metal window sash provided with
35 side parts having outwardly flared portions provided with inwardly bent lips.

9. A metal window sash whose side rails are provided with outwardly flared resilient side parts with inwardly bent lips adapted to
40 enter the grooves of the window frame.

In testimony whereof I affix my signature in presence of two witnesses.

FLETCHER D. SWANEY

Witnesses:

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