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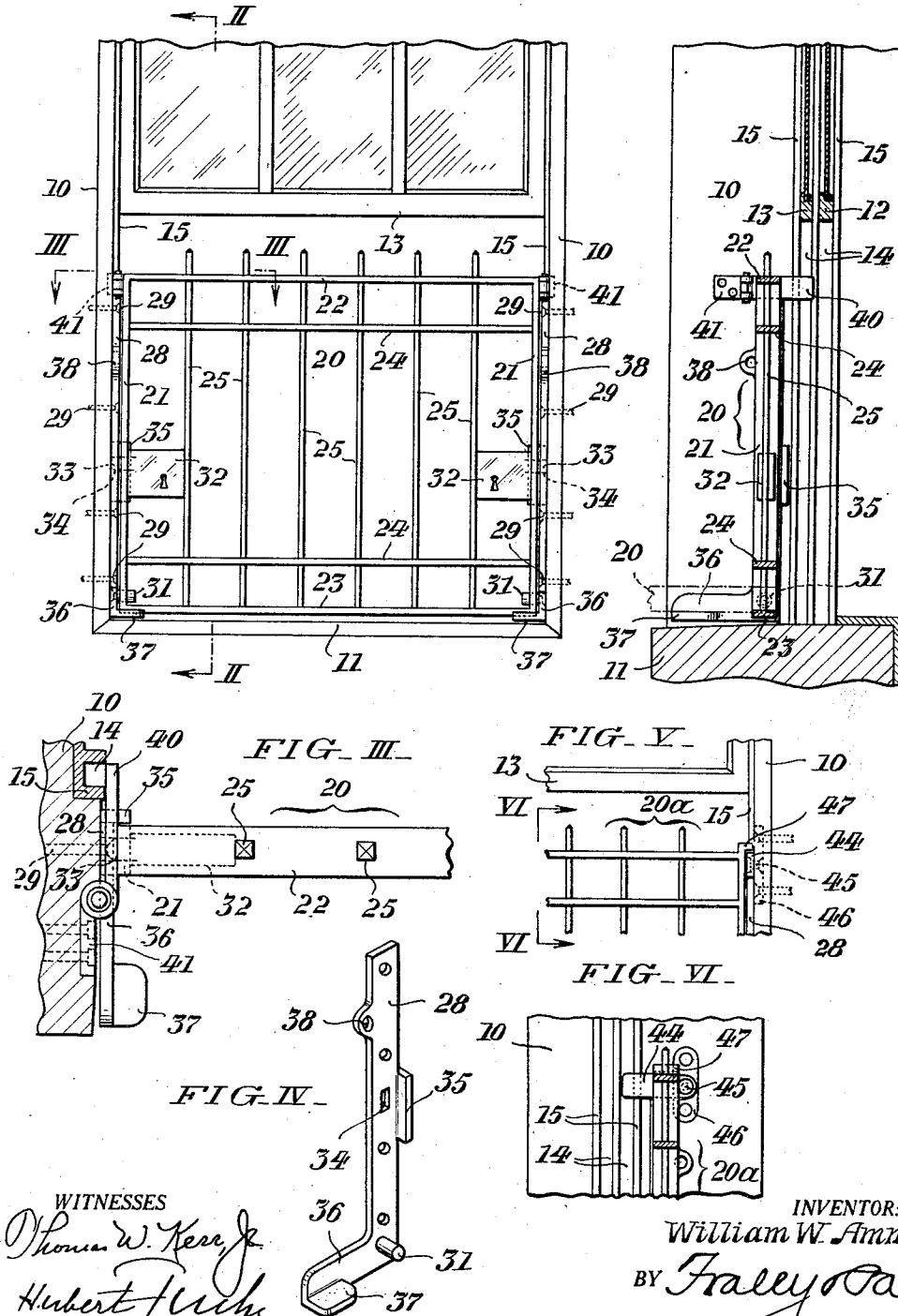
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WINDOW GUARD

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FIG. I.

FIG. II



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WINDOW GUARD

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My invention relates to window guards, and is adaptable and specially advantageous as a detention guard for hospitals, asylums, and other buildings where detention may be necessary. In suitable forms of embodiment, such as hereinafter described, the invention permits the freest use of the window for ventilation, while at the same time effectually preventing unauthorized egress or ingress thereby. The forms of embodiment here shown and described are simple and strong in construction, comparatively inexpensive to manufacture, easy and inexpensive to install, and ordinarily quite secure against being tampered with. Other advantages that can be realized through the invention will appear hereinafter.

In the drawings, Fig. I is a fragmentary front or outside elevation of a window equipped with my guard in a convenient form of embodiment.

Fig. II is a view at right angles to Fig. I, with various parts in vertical section as indicated by the line and arrows II—II in Fig. I.

Fig. III is a partial plan view, with certain parts in horizontal section as indicated by the line and arrows III—III in Fig. I.

Fig. IV is a perspective view of one of the parts shown in Figs. I—III.

Figs. V and VI are fragmentary views, similar to Figs. I and II, showing somewhat different forms of certain parts.

Figs. I and II show an ordinary window with opposite jambs 10, 10, sill 11, and lower and upper sashes 12 and 13 arranged to slide up and down as usual in grooves 14, 14 between stops or stiles 15 on the jambs. However, it will be understood that the invention is not in all respects limited to sliding sashes, as distinguished from casement windows and other forms.

The guard proper is here shown as a grille 20 adapted to bar approximately half of the window opening, and arranged in front of the lower half. The grille 20 is of size and shape to fit between the opposite window jambs 10, 10, and of any suitable form and construction. In the present instance, the grille 20 consists of a rectangular frame

composed of upright side bars 21, 21, and upper and lower horizontal bars 22, 23 interconnecting them, together with a filler comprising intermediate horizontal bars 24, 24 also interconnecting the side bars 21, 21, and intermediate uprights or pickets 25 extending from the lower bars 23 up through the bars 24, 24, and 22, and interconnecting all the horizontals. Preferably the parts of the grille 20 are either made originally integral with one another or effectually united by welding at all intersections.

When the guard 20 is closed, as shown, each upright side bar 21, 21 is immovably secure to the corresponding window jamb 10, 10. As shown in Fig. I, this is done by means of an upright mounting bar 28 fixed to each jamb 10, as by headed fastenings 29 extending into the jamb, and preferably having their heads countersunk in the bar. The guard 20 is pivoted to the mountings 28, 28 about a horizontal axis near its lower edge, by means of studs or pintles 31, 31, riveted and welded or otherwise fixed in one of the parts and engaged in suitable openings in the other part. As shown in Fig. I, the reduced ends of the studs 31 are riveted and welded in countersunk holes in the bars 28, 28, and their projecting ends are engaged in round holes in the guard sides 21, 21. Ordinarily, the guard 20 is also detachably secured to the mounting bars 28, 28 at points considerably above its pivots 31, 31, as by means of locks 32, 32 mounted and secured in the guard sides 21, 21 and to the adjacent pickets 25, 25, and equipped with sliding bolts 33, 33 that engage in socket openings 34 (Fig. IV) in the mountings 28. As shown, the mounting bars 28, 28 have stop-shield ears 35, 35 on their inner (rear) edges, that limit inward movement of the guard 20, and also interfere with any attempt to saw the bolts 33, 33. These ears 35, 35 may be formed integral with the bar 28, 28 or welded thereto, and may be case-hardened.

Normally, the guard 20 occupies the closed upright position shown in Figs. I and II, where it effectually bars the lower half of the window opening. When the locks 32,

32 are unlocked, however, the guard 20 can be shifted out of the way so as to leave the window opening clear, swinging downward and outward about its pivots 31, 31 into the dot-and-dash position shown in Fig. II, where it serves as a platform for cleaning or painting the window, or for any other purpose. As shown in Figs. I-IV, each of the mounting bars 28, 28 has an outward extending stop-support arm 36 at its lower end, provided with a lateral lug or ear 37 on which the guard sides 21, 21 can rest when the guard is in its horizontal open position. Each bar 28 also has an apertured lug 38 for the attachment of a window washer's belt or the like.

To prevent escape over the closed guard 20 by simply lowering both upper and lower window sashes 12, 13, one or more stops 40 may be provided, adapted to extend into the path of the upper sash 13 and prevent it from being lowered sufficiently for a man to squeeze through over it, although preferably still allowing the upper sash to be lowered enough for ventilation. This stop 40 is movable so that it can be withdrawn out of the way of the sash 13 to permit the latter to be lowered freely, but provision is made for locking it against unauthorized withdrawal. As shown in Figs. I-III, the stop or stops 40 are not attached to the guard 20, or even mounted on the bars 28, 28, but are independently mounted on the jambs 10, 10, one at either side of the window; each stop 40 being hinged or pivoted to an ear 41 suitably fixed on the jamb 10 outside the corresponding bar 28, so as to swing inward and outward horizontally. The vertical location is such that when a stop 40 is in its active inward-extending position as shown in Figs. II and III, it extends between the jamb 10 and the vertical edge of the closed guard 20 at its upper corner, just above a shoulder afforded by the upper end of the bar 28. When, therefore, the guard 20 is closed and locked, it thereby blocks, holds, and locks the stop 40 against swinging outward out of the way of the sash 13. The upper end of the bar 28 helps to sustain the stop against downward pressure or impact from the sash 13. On the other hand, when the guard 20 is shifted and swung downward as already explained, it not only leaves the window opening substantially free and clear; but also leaves the stop 40 free to swing outward.

Figs. V and VI illustrate a differently arranged stop 44, pivoted to the jamb 10 on a horizontal axis or pivot 45 that is secured to a plate 46 fixed to the jamb. Thus the stop 44 swings parallel with the jamb face 10. When swung inward, this stop 44 extends over the shoulder at the upper end of the bar 28 into the path of the upper sash 13, and is held and locked in this active position by a stop projection 47 on the vertical edge

of the guard 20a, which lies directly over said bar when the guard is closed and locked. When the guard 20a is swung outward, on the other hand, the stop 47 soon travels beyond the pivot 45 and leaves the stop 44 free to swing upward and outward out of the way. Having thus described my invention, I claim:

1. The combination with opposite window jambs and upper and lower window sashes; of a stop adapted to extend into the path of one of the sashes to limit the vertical movement thereof, but withdrawable out of the way of said sash to permit of its being moved freely; and a guard normally closed barring the window opening opposite the other sash and cooperating with said stop to prevent shifting of the stop as aforesaid, but also shiftable out of the way to leave the window opening substantially clear and said stop free for withdrawal as aforesaid.

2. The combination with opposite window jambs and upper and lower window sashes; of a stop pivoted on one of the jambs to swing into a position extending into the path of one of the sashes to limit the vertical movement thereof, and also swingable out of the way of said sash; and a guard normally closed barring the window opening opposite the other sash and blocking said stop from swinging out of the way as aforesaid, but itself also swingable out of the way to leave the window opening substantially clear and said stop free to swing out of the way.

3. The combination with opposite window jambs and upper and lower window sashes; of a shouldered mounting bar secured against one of said jambs; a stop pivoted on one of the jambs outside said mounting bar, swingable inward into a position extending over a shoulder on the bar into the path of one of the sashes to limit the vertical movement thereof, and also swingable outward out of the way of said sash; and a guard attached to said mounting bar normally closed barring the window opening opposite the other sash and cooperating with said stop to hold it in position over said shoulder, but also shiftable out of the way to leave the window opening substantially clear and said stop free to swing out of the way.

4. The combination with opposite window jambs and upper and lower window sashes; of a stop hinged to one of the jambs to swing horizontally into a position extending inward into the path of one of the sashes to limit the vertical movement thereof, but also swingable outward out of the way of said sash; a guard, comprising an outer frame composed of vertical and horizontal members and a filler carried thereby, normally closed with the corner of said frame against said stop so as to prevent it from swinging outward as aforesaid, but itself also shiftable out of the way to leave the window opening

substantially clear and said stop free to swing.

5. A guard comprising mounting bars adapted to be secured against opposite window jambs; a stop pivoted to one of the jambs, on a horizontal axis, to swing inward parallel with the jamb into a position extending into the path of one of the sashes to limit the vertical movement thereof, and also swingable outward out of the way of said sash; a guard normally closed barring the window opening opposite the other sash, but pivoted about a horizontal axis to swing open downward and outward leaving the window opening substantially clear; and stop means on the edge of said guard for engaging over said swinging stop to lock the same in active position when the guard is closed.

6. The combination with opposite window jambs and upper and lower window sashes; of a shouldered mounting bar secured against one of said jambs; a stop pivoted on one of the jambs on a horizontal axis outside said mounting bar to swing inward parallel with the jamb into a position extending over a shoulder on the bar into the path of one of the sashes to limit the vertical movement thereof, and also swingable outward out of the way of said sash; a guard attached to said mounting bar normally closed barring the window opening opposite the other sash, but pivoted about a horizontal axis to swing open downward and outward leaving the window opening substantially clear; and stop means on the edge of said guard for engaging over said swinging stop, so as to hold the latter between the same and said shoulder.

7. A guard comprising mounting bars adapted to be secured against opposite window jambs; a grille pivoted between said mounting bars about a horizontal axis, adapted to lie between them barring the window opening opposite the lower sash, and to swing open downward and outward leaving the window opening substantially clear; and outward extending stop supports carried by said mounting bars for sustaining said grille in open position.

In testimony whereof, I have hereunto signed my name at Philadelphia, Pennsylvania, this 15th day of September, 1930.

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