

UNITED STATES PATENT OFFICE.

ALBERT W. KRIEGER, OF AVIS, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO REUBEN H. MEEK, OF AVIS, PENNSYLVANIA.

WINDOW-FRAME.

940,029.

Specification of Letters Patent.

Patented Nov. 16, 1909.

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To all whom it may concern:

Be it known that I, ALBERT W. KRIEGER, a citizen of the United States, residing at Avis, in the county of Clinton and State of Pennsylvania, have invented a new and useful Window-Frame, of which the following is a specification.

The objects of the invention are, generally, the provision in a merchantable form of a device of the class above specified which shall be inexpensive to manufacture, facile in operation, and devoid of complicated parts; specifically, the provision of a window casing of novel and improved construction; of a panel adapted to be inserted into a slot in the side of said casing; and of novel means for directing the movement of the panel in said slot and for limiting said movement; other and further objects being made manifest hereinafter as the description of the invention progresses.

The invention consists in the novel construction and arrangement of parts hereinafter described, delineated in the accompanying drawings, and particularly pointed out in that portion of this instrument wherein patentable novelty is claimed for certain distinctive and peculiar features of the device it being understood that within the scope of what hereinafter is thus claimed divers changes in the form, proportions, size and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

Similar numerals of reference are employed to denote corresponding parts throughout the several figures of the drawings.

In the accompanying drawings, Figure 1 shows my invention in vertical longitudinal section; Fig. 2 is a transverse section on the line A B of Fig. 1 in the direction of the arrow; Fig. 3 is a vertical longitudinal section of the device the panel being removed from the slot in the casing; and Fig. 4 is a detail perspective of the plate which is assembled with the panel.

In the accompanying drawings, the casing of a window is denoted generally by the numeral 1. The uprights 2 of the casing as shown most clearly in Fig. 2 are formed from a single piece of material which is plowed longitudinally to form parallel channels 3 separated by a parting-strip 4. One of

the uprights 2 of the casing is provided with a longitudinally disposed slot 5 which extends entirely through the said upright terminating anteriorly at the sill 6 of the window. To fit this slot 5 in the upright I provide a panel 7 the upper end of which is caused to slope downward and inward as denoted by the numeral 8 the upper end of the slot 5 in the upright being beveled to conform to the upper end 8 of the panel, said beveled portion being denoted by the numeral 9. The width of the slot 5 is most clearly shown in Fig. 2 and it will there be seen that this slot includes the channel 10 in which the lower sash moves and the parting strip which separates the channel 10 from the channel 11 in which the upper sash moves. Since the panel 7 is substantially co-extensive in width with the width of the slot 5 it is obvious that the inner face of the panel will carry a portion of the channel 10 and a portion 12 of the parting strip 4 which outstands between the two channels. It is to be understood that the length of the slot 5 in the upright is slightly greater than the height of either of the window sashes 20 and 21.

The side walls of the slot 5 in the uprights are transversely grooved as denoted by the numeral 14 and these grooves slant upward from the inner to the outer face of the casing. Guide plates 15 are provided which are adapted to be mounted upon the outer face of the panel 7. As most clearly shown in Fig. 4, these guide plates 15 comprise a body portion 16 arranged to extend laterally beyond the edges of the panel and provided with an aperture 17 through which may be passed a screw, nail, or like element whereby the guide plate may be assembled with the panel. The guide plate is slitted adjacent its edges to form arms 18 and these arms are downbent at an angle to the body portion 16 of the guide plates and to the tongue 19 which extends from the body portion 16 of the plate. As shown in Fig. 2 the sides of the panel are grooved to receive the arms 18, a portion of said arms being disposed within the contour of the panel, the remainder of said arms projecting laterally beyond the sides of the panel to register in the grooves 14 in the casing. It is to be understood that there may be any number of these oppositely disposed grooves 14 and that any number of guide plates 15 may be

employed. In the present instance I have shown the two sets of grooves and have provided two of the guide plates 15 to register in said grooves.

- 5 When it is desired to remove the sashes from the window casing, the lower sash 20 may be raised to disclose the panel 7. The panel 7 may then be raised upward, and the arms 18 of the guide plates moving in the
10 grooves 14 in the casing will cause the said panel to move outwardly simultaneously with its upward movement. The panel 7 need not be entirely removed from the casing; it need be moved upward and outward
15 no more than is necessary to retract the portion 12 of the parting strip which is carried by the panel 7 flush with the bases of the channels 10 and 11 in which the sashes move. When the channels have thus been moved
20 upward and outward to the required degree, the lower sash 20 may be dropped to contact with the sill. The channel 10 in which the lower sash reciprocates having been deepened by the outward movement of the panel
25 first one end and then the other of the lower sash may be withdrawn from the frame. When the lower sash has thus been removed, the upper sash may be dropped into contact with the sill and since the portion 12 of the
30 parting strip has been withdrawn by the upward and outward movement of the panel, the upper sash 21 may be moved first into the channel 10 and then free from the window frame.
- 35 The construction of the device is of importance since it permits the uprights 2 each to be formed from an integral piece of material the parting strip 4 in its turn being integral with the uprights 2. The window sashes may readily and quickly be assembled with the casing and in mounting
40 them in place no skilled labor is required. When it is desired to remove the window sash from the casing the operation may be rapidly carried out, a consideration which is
45 of great importance in time of fire or panic. The portion of the body 16 of the guide plate which extends laterally beyond the sides of the panel serves to limit the downward
50 ward movement of said panel in the slot 5

by engaging the face of the window casing, and the arms 18 which move in the grooves 14 serve to insure the outward movement of the panel as it moves upward. It is to be understood that the panel 7 may be provided upon its inner face with a flush handle or knob of any approved type whereby the said panels may be raised, and likewise any simple locking device may be employed for holding the said panel in its place in
55 the slot 5.

Having thus described my invention what I claim as new and desire to protect by Letters Patent is.

1. In a device of the class described, a 65 slotted casing; a panel to fit the slot in the casing; and a guide plate carried by the panel and having inclined arms to inclose the panel and to engage the casing in sliding relation. 70

2. In a device of the class described, a slotted casing; a panel to fit the slot in the casing; and a guide plate carried by the panel and having inclined arms to fit in the edges of the panel and to engage the casing
75 in sliding relation.

3. In a device of the class described, a slotted casing a panel to fit the slot in the casing; and a guide plate carried by the panel and comprising a body portion later- 80 ally extended beyond the panel to engage the face of the casing and inclined arms to inclose the panel and to engage the casing in sliding relation.

4. In a device of the class described, a 85 slotted casing; a panel to fit in the slot in the casing; and a guide plate carried by the panel and comprising a body portion laterally extended beyond the panel to engage the face of the casing and inclined arms to
90 fit in the edges of the panel and to engage the casing in sliding relation.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ALBERT W. KRIEGER.

Witnesses:

CLIFFORD STABLY,
R. H. MEEK.