D. J. MURNANE.

SAFETY MEANS FOR SETTING PLATE GLASS.

APPLICATION FILED JULY 15, 1914.

1,138,499.

Patented May 4, 1915.

2 SHEETS—SHEET 1.

Fig. 1.

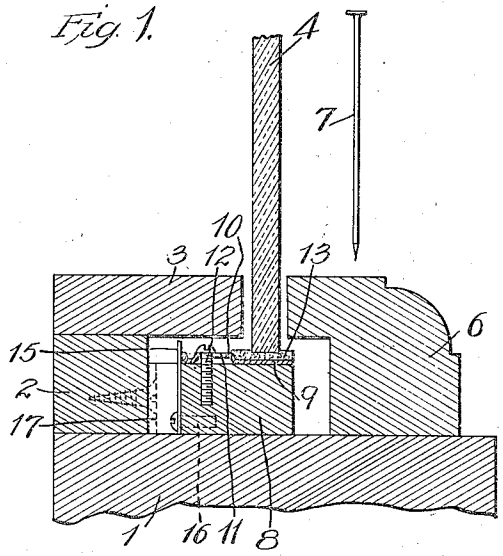


Fig. 8.

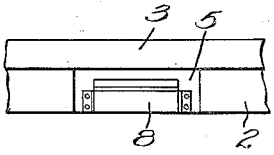


Fig. 2.

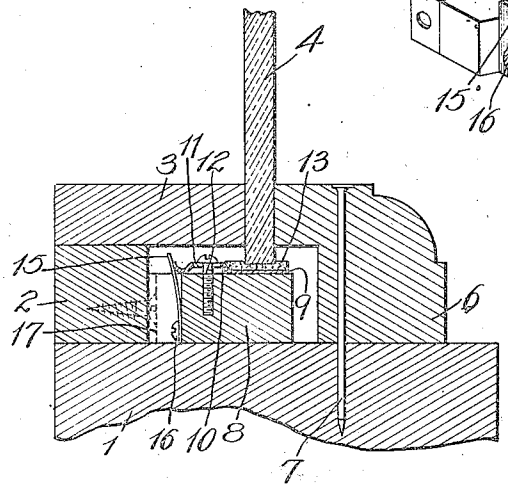


Fig. 3.

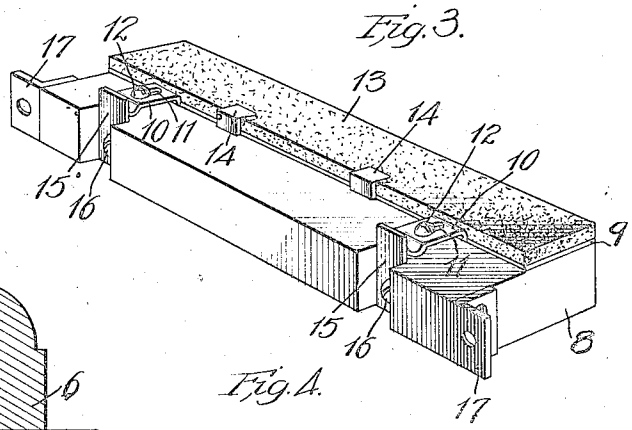


Fig. 4.

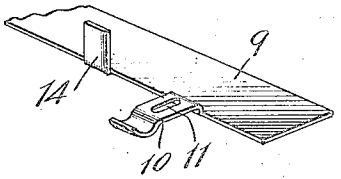
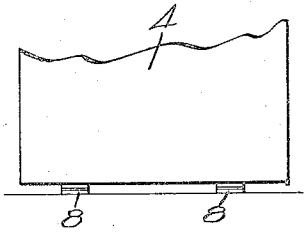


Fig. 7.



Witnesses:
Herbert Helmer
W. Monroe Hunnam

Inventor.
Daniel J. Murnane
By Jones, Addington, Ames & Seibold
Attorneys

D. J. MURNANE.

SAFETY MEANS FOR SETTING PLATE GLASS.

APPLICATION FILED JULY 15, 1914.

1,138,499.

Patented May 4, 1915.

2 SHEETS—SHEET 2.

Fig. 5.

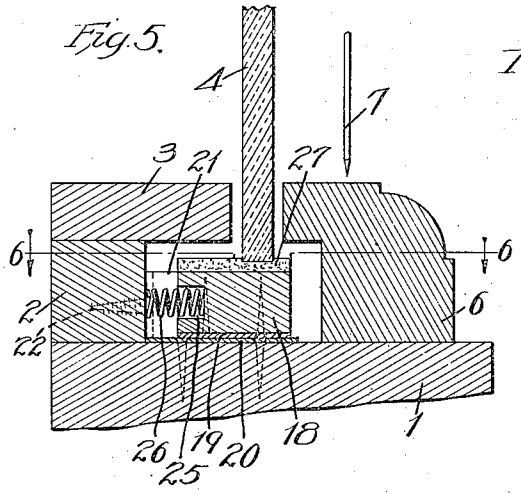


Fig. 6.

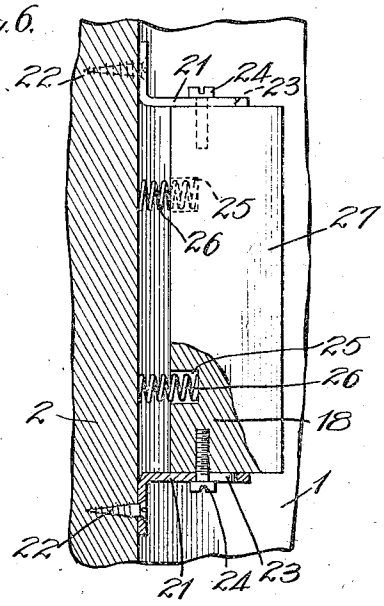


Fig. 10.

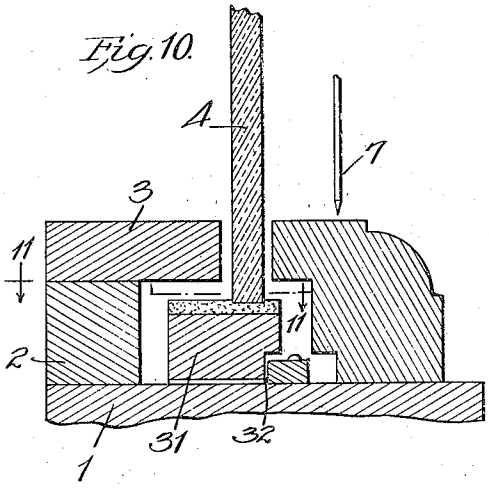


Fig. 11.

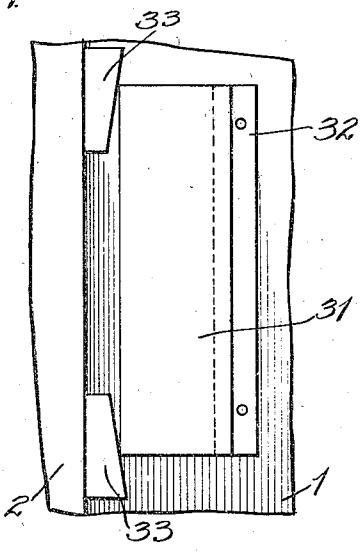
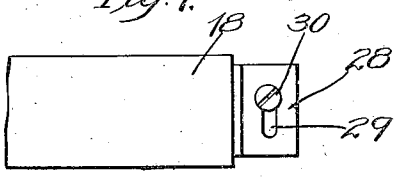


Fig. 9.



Witnesses:
Herbert F. Palmer
V. Monroe Hunnaman

Inventor:
Daniel J. Murnane
By Jones, Addington, Ames & Seibold
Attorneys

UNITED STATES PATENT OFFICE.

DANIEL J. MURNANE, OF GLENDALE, MISSOURI.

SAFETY MEANS FOR SETTING PLATE-GLASS.

1,138,499. Specification of Letters Patent. Patented May 4, 1915.

Application filed July 15, 1914. Serial No. 851,092.

To all whom it may concern:

Be it known that I, DANIEL J. MURNANE, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented new and useful Improvements in Safety Means for Setting Plate-Glass, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawing, forming a part of this specification.

The object of my invention is to provide a safety means for setting plate glass so that the glass may be set tightly against the rabbet at its lower edge and throughout the length of the rabbet and the width of the glass.

In the ordinary plate glass setting there is at the sill, or base, or lower edge of the glass, a molding, usually the inner one, forming a rabbet against which, throughout its length, the inner face of the glass at the lower edge is supported to bear tightly. Supporting blocks, usually two in number, are provided, on which the lower edge of the glass rests, so that the weight of the entire glass plate is carried by these blocks. A clamping molding is placed against the opposite face of the glass and is secured in position, thereby clamping and holding the glass in position.

In practice it is found very difficult to set the glass so that it will bear tightly against the rabbet throughout the width of the glass, particularly at or near the supporting blocks. This is due to the fact that the great weight of the glass on the supporting blocks makes it difficult and hazardous, if not impossible, to push the glass up tightly against the rabbet adjacent to these blocks after it has been set on the blocks. A space of $\frac{1}{32}$ of an inch to $\frac{3}{16}$ of an inch in width is usually left between the rabbet and the glass when the glass is first let down on the blocks, this being about the thickness of the lifting straps commonly employed in lifting and handling plate glass. The glass is then supposed to be pushed up against the rabbet, but owing to the difficulties mentioned seldom is. If then the glass is not pushed back firmly against the rabbet at the blocks, it will be so pushed back on each side of them, because the glass is more or less easily sprung on either side of the blocks, and this results in a stressed or strained condition of the glass which results in the cracking and breaking of the glass.

It is the object of my invention to provide means whereby the glass may be readily and conveniently brought in contact with the rabbet at the blocks and throughout its entire length, whereby all undue stresses and strains are avoided.

In carrying out my invention I provide a suitable block or support forming a rest or carrier for the lower edge of the plate glass, which is so constructed and arranged that after the plate has been set in its approximate position and the setting straps removed, a light pressure exerted from the opposite side will suffice to readily slide the glass tightly against the rabbet throughout its length. The pressure is readily and safely applied when placing the clamping molding in position.

For the purpose of disclosing my invention I have illustrated various forms thereof in the accompanying drawings, in which:—

Figure 1 is a transverse section of a structure embodying my invention, showing the glass after first being set in place, but before it is moved into clamped position; Fig. 2 is a similar view showing the glass moved into clamping position and the clamping molding in its finally secured position; Fig. 3 is a perspective view of one of the safety blocks on which the glass is adapted to rest; Fig. 4 is a detail perspective view of a part of the sliding member; Fig. 5 is a transverse sectional view of a modification of my invention; Fig. 6 is a sectional plan view thereof, taken on the line 6—6 of Fig. 5; Fig. 7 is a face view of a plate glass showing the safety blocks in position; Fig. 8 is a face view of the back rabbet showing the recesses for the setting blocks; Fig. 9 is a plan view of a modified block-securing means; Fig. 10 is a cross-sectional view of another form of the invention; and Fig. 11 is a plan view of the same.

In the embodiment of the invention illustrated, the sill is indicated at 1. The inner molding comprises a strip 2 and a second strip 3 secured together and extending the width of the plate glass 4. The strip 2 is suitably recessed for receiving the safety blocks hereinafter described, as at 5 (Fig. 8). This inner molding forms a rabbet for the glass. After the glass has been placed on the supporting blocks in its approximate position, the outer molding 6 is forced against the outside of the glass and then secured to the seat or sill by means of screws 7 or in any other desired way.

The safety blocks 8, before referred to, are placed as indicated in Fig. 7. These blocks

comprise rectangular wood or metal blocks, as shown in Fig. 3. On the upper face of these blocks I provide a movable strip 9 which is preferably formed of brass or some other material that will readily slide with little friction across the top of the metal blocks 8. This strip is provided at its ends with rearwardly extending lugs 10 by which it is secured in position on the blocks, the lugs being provided with slots 11 through which project securing screws 12. The upper surface of this strip is provided preferably with a soft seating material 13, such as leather, to provide a seat for the edge of the glass such that the friction or resistance to sliding between the glass and the top of this material will be greater than the friction between the strip 9 and the blocks 8, whereby when the glass is pressed toward the rabbet 3, the glass and strip 9 will readily move together. The seating strip 9 is provided with lugs 14 integrally formed therewith and which are adapted to be bent down and over the friction material 13 to hold the same in place. In order that this anti-friction safety strip 9 may be held in its outermost position I provide a pair of thin, flat or leaf springs 15, secured in recesses at each end of the back of the block by means of suitable screws 16, and engaging the lugs 10. On either side of the blocks 8 are secured a pair of angle lugs 17 provided with suitable screw openings and by which the blocks are secured to the strip 2.

In operation, the glass is first set in position as illustrated in Fig. 1, that is, with the lower edge of the glass resting upon the friction material 13 on the top of the sliding carrier. At this time the carrier is in its outermost position due to the springs 15, and the glass is so set that there is a clearance of, as least, the thickness of straps used to lift and carry the glass, between it and the rear rabbet 3. The molding 6 is then placed in position and pressed up against the glass, forcing the glass on its carriers into close engagement with the rabbet 3, after which the molding is secured in position by the screws or nails 7 at suitable intervals along the molding. In this manner it will be seen that the glass at its base may be moved into tight engagement with the inner rabbet and throughout its entire length, because the anti-friction carrier 9 readily slides on the top of the block.

In Figs. 5 and 6 the same clamping construction is shown. The safety sliding blocks, however, are modified. In this structure the supporting block 18 is provided on its lower side with a metal strip 19 suitably secured thereto, and rests on a metal strip 20 secured to the sill so that it is adapted to slide thereon with slight friction. If the sill is of metal the latter strip may be omitted. The block 18 is locked to the strip 2 by means of a pair of angle lugs 21. These lugs are secured to the strip 2 by means of screws 22, and on their sides are provided with slots 23 through which project screws 24 which pass into the block 18. Interposed between the back of the block and seated in suitable recesses 25 in the block are coiled springs 26 which serve to keep the block in its outermost position when no glass is clamped in position. As the lugs 23 which connect the block with the back rabbet are provided with slots, the block can slide back on the sill 1 with but little friction when the glass is being set in position.

In order that there may be no danger of breaking or chipping the glass, and also to aid in the glass getting a good frictional hold on the block 18 so as to move therewith, I cover the top of the block with a leather strip 27, or some other soft and frictional material which may be secured thereon in any desired way. The block 18 may be locked to the sill 1 instead of to the back rabbet as above described. In such case (Fig. 9) angle lugs 28 are secured to each end of the block 20, their lower parts being provided with slots 29 through which project screws 30 which pass into the sill 1, or other equivalent means could be used.

In Figs. 10 and 11, the block 31 is similar to block 18 of Figs. 5 and 6, except that a suitable stop or stops 32 for the forward edge of the block are secured by nails or screws or in any desired way to the sill 1. These stops are intended to limit the forward movement of the block and to place and properly aline it to receive the edge of the glass when it is let down upon it. The stops may take any desired form—nails or screws would suffice. As shown, the adjacent edges of the block and of the outer molding are recessed to receive them.

To hold the blocks in their forward positions, suitable wedges 33 may be driven in between the blocks and the back rabbet until the glass is set down on the blocks. These wedges may then be removed, and the glass together with the blocks pushed back into position with the glass against the back rabbet, as in the case of the other constructions described.

It will be understood that the recesses in which the laterally adjustable blocks are located may extend throughout the length of the moldings, that the rear molding may be made in one piece, and while I have shown and described these several embodiments of my invention, it will be understood that various changes may be made therein without departing from the spirit of the invention as set forth in the accompanying claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a safety means for setting plate

glass, the combination with a recessed rabbet against which the glass is adapted to be clamped, of a recessed clamping molding adapted to bear against the opposite side of the glass from the rabbet, and a laterally adjustable setting block in the recess of said rabbet, and molding on which the glass is adapted to rest.

2. In a safety means for setting plate glass, the combination with a rabbet against which the glass is adapted to be clamped, of a clamping molding adapted to bear against said glass opposite the rabbet, and a laterally adjustable setting block secured in position between said rabbet and molding and on which the lower edge of the glass is adapted to rest.

3. In a safety means for setting plate glass, the combination with a rabbet against which the glass is adapted to be clamped, of a clamping molding adapted to bear against said glass opposite the rabbet, a recess formed between said rabbet and said molding, a laterally adjustable setting block secured in position within said recess and on which the lower edge of the glass is adapted to rest.

4. In a safety means for setting plate glass, the combination with a rabbet against which the glass is adapted to be clamped, of a clamping molding adapted to bear against said glass opposite the rabbet, a recess formed between said rabbet and molding, a laterally adjustable setting block secured within said recess and spring pressed toward said molding, said block being adapted to receive the lower edge of the glass.

5. In a safety means for setting plate glass, a rabbet against which the glass is adapted to be clamped, a clamping molding, a setting block having a laterally adjustable glass receiving surface, said surface being readily and easily movable to carry the glass into contact with said rabbet when pressure is applied on the opposite side of the glass.

6. In safety means for setting plate glass, a recessed rabbet against which the glass is adapted to be clamped, a clamping molding, a setting block having a laterally adjustable glass receiving surface associated therewith and extending into the recess of the rabbet, said surface being readily and easily movable to carry the glass to its clamped position when pressure is applied thereto, said molding having a recess to receive that portion of said setting block which projects beyond the plane of the face of the glass.

7. In safety means for setting plate glass, a rabbet against which the glass is adapted to be clamped, a clamping molding, a setting block having a laterally adjustable, forwardly spring pressed, glass receiving surface, said surface being readily and easily movable to carry the glass to its clamped position when pressure is applied in placing said clamping molding in position.

8. In safety means for setting plate glass, a recessed rabbet against which the glass is adapted to be clamped, a clamping molding, a setting block having a laterally adjustable, forwardly spring pressed glass receiving surface and extending into the recess of the rabbet, said surface being readily and easily movable to carry the glass to its final clamped position when pressure is applied in placing said clamping molding in position, said molding having a recess to receive said setting block, and means for securing said block within the recess.

9. In safety means for setting plate glass, a rabbet against which the glass is adapted to be clamped, a clamping molding, a setting block secured in position and having a laterally adjustable anti-friction glass receiving member having a covering of soft material on which the glass is adapted to rest with frictional contact, said member being readily and easily movable to carry the glass into final clamped position without strain or distortion by the movement of the outer clamping molding into clamping position.

10. In safety means for setting plate glass, means for clamping the glass in place, a laterally movable member on which the glass is adapted to rest, the friction between said glass and said movable member being substantially greater than the friction between said movable member and its support.

11. In safety means for setting plate glass, the combination with a rabbet for one side of the glass, of a clamping molding for the opposite side of the glass, and laterally adjustable setting blocks between the rabbet and molding on which the glass rests, the width of said blocks being greater than the thickness of the glass.

12. In safety means for setting plate glass, the combination with a rabbet against which the glass is adapted to be clamped, of a clamping molding adapted to bear against the opposite side of the glass from the rabbet, a laterally adjustable setting block between the said rabbet and molding on which the glass is adapted to rest, and means to forwardly position said block to properly receive the glass and to permit the same to be pushed back toward the rabbet to bring the glass in contact therewith.

In witness whereof, I have hereunto subscribed my name in the presence of two witnesses.

DANIEL J. MURNANE.

Witnesses:
ROBERT LEWIS AMES,
ANNE SOLOMON.

Correction in Letters Patent No. 1,138,499.

It is hereby certified that in Letters Patent No. 1,138,499, granted May 4, 1915, upon the application of Daniel J. Murnane, of Glendale, Missouri, for an improvement in "Safety Means for Setting Plate-Glass," an error appears in the printed specification requiring correction as follows: Page 1, line 22, for the word "supported" read *supposed;* and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 25th day of May, A. D., 1915.

[SEAL.]

R. F. WHITEHEAD,

Acting Commissioner of Patents.