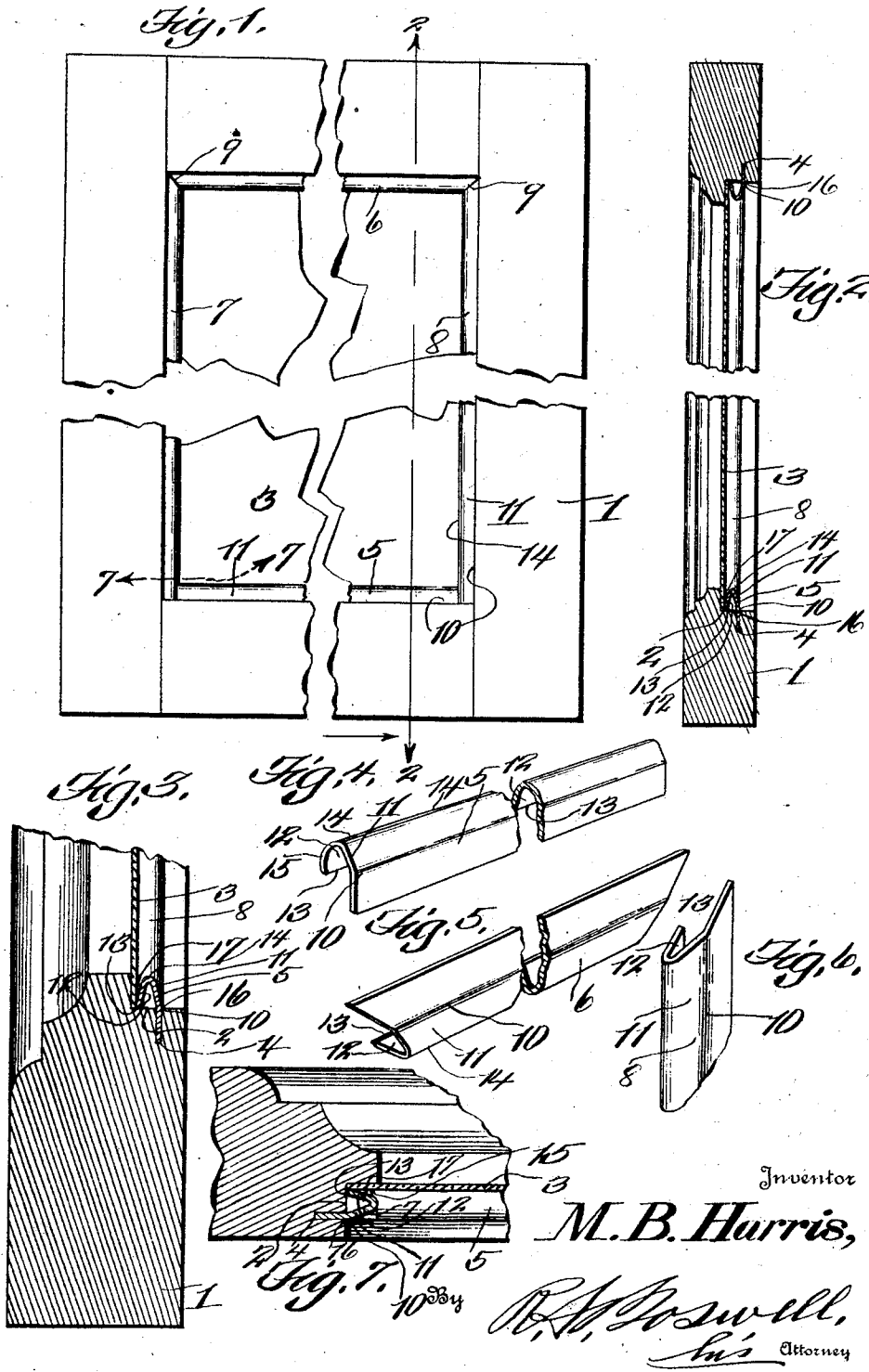


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M. B. HARRIS
SASH GLAZING DEVICE
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UNITED STATES PATENT OFFICE.

MILETUS B. HARRIS, OF RICHMOND, VIRGINIA.

SASH-GLAZING DEVICE.

Application filed September 19, 1922. Serial No. 589,109.

To all whom it may concern:

Be it known that MILETUS B. HARRIS, a citizen of the United States of America, residing at Richmond, in the county of Henrico and State of Virginia, has invented new and useful Sash-Glazing Devices of which the following is a specification.

It is well known that heretofore glaziers' points and putty are used for glazing sashes, and also metal strips have been heretofore used. Putty eventually cracks and crumbles away, and furthermore moisture seeps through.

It is the purpose of the present invention to provide a sash glazing device which, while metal strips are used, will not necessitate subsequent bending when applied, but will bear against the glass, and retain it firmly in position, as soon as the strip is seated in its retaining groove in the rabbet of the sash.

Another purpose is the provision of a sash glazing device, wherein the upper adjacent ends of the glass retaining strips are mitered, so that the strips of the side stiles of the sash will act to retain the retaining strip of the upper rail of the sash in position and vice versa.

Still another purpose is the provision of a sash glazing device wherein, while the upper glass retaining strip and the side strips are mitered, the lower glass retaining strip has its ends square, so as to contact with the rolled or curved edges of the side retaining strips, and hold them in position. The lower retaining strip can be easily removed, by using a sharp instrument to pry it out.

A further purpose is to provide a sash glazing device, wherein the glass retaining metal strip seats in a groove in the bottom of the rabbet of the sash, and is provided with a longitudinally over-bent flange, which extends normally a greater distance laterally from the body of the strip, when not applied, than when it is applied, in which case the flange, when the strip is applied, will bear yieldably upon the glass and hold it securely in position. In this way the over-turned flange will bear yieldably against the glass and hold it in position.

Still further, a sash glazing device is provided, wherein the lower glass retaining

strip at its ends has slight extension lips, which engage inwardly of the side strips, to guide the lower glass retaining strip into position.

It is to be understood that the particulars herein given are in no way limitative and that while still keeping within the scope of the invention, any desired modifications of detail and desired proportions may be made in the apparatus according to circumstances.

The invention comprises further features and combination of parts, as will be hereinafter set forth, shown in the drawings and claimed.

In the drawings:—

Figure 1 is a view in elevation of a sash broken at the top, bottom and sides, showing the improved sash glazing strips applied;

Figure 2 is a sectional view on line 2—2 of Figure 1;

Figure 3 is an enlarged detail sectional view of the lower part of the sash, more clearly showing the retaining strip;

Figure 4 is an enlarged detail perspective view of the lower glass retaining strip;

Figure 5 is a detail perspective view of the upper glass retaining strip;

Figure 6 is a detail perspective view of the upper end of one of the side glass retaining strips;

Figure 7 is an enlarged detail sectional view on line 7—7 of Figure 1, showing how the lip on one of the ends of the lower glass retaining strip engages inwardly of one of the side glass retaining strips, to guide the lower strip into position;

Referring to the drawings, 1 designates a sash which is of the usual construction, therefore is provided with the conventional form of rabbet 2 for the reception of the glass 3. The bottom of the rabbet on the top and bottom rails thereof and the side stiles, midway of the bottom, is provided with a groove 4, which receives sash glazing strips 5, 6, 7 and 8, all of which are constructed of some suitable sheet metal, so that the strips may retain their shape.

It is to be noted that the groove 4 may be any depth whatever, in order to comply fully with all circumstances. The upper glass retaining strip and the side glass retaining strips have their adjacent ends mitered as shown at 9, in order to retain the upper and

side strips in position. In fact the side strips 7 and 8 prevent displacement of the upper glass retaining strip 6, which in turn prevents movement of the upper ends of the side strips toward each other.

The lower ends of the side glass retaining strips 7 and 8 are squared off so as to abut the bottom of the lower portion of the rabbet of the sash. The lower glass retaining strip has its ends squared, and when in position, its ends abut the lower portions of the side glass retaining strips, thereby preventing movement toward each other of the lower ends of the side glass retaining strips. Since the glass retaining strip 5 is at the bottom of the sash, there is not as much chance for this strip to become displaced as would be the case with the upper glass retaining strip, if it were not for the mitered corners.

Each glass retaining strip is bent longitudinally as at 10, so as to provide the portion 11, which extends slightly toward the glass, and is provided with an overturned flange 12. The bend between the flange 12 and the portion 11 is of arcuate or rolled form, so that the flange 12 may bear yieldably against the glass. Prior to inserting any one of the glass retaining strips in position, the edge 13 of the flange 12 assumes a position of greater distance from the bend 10, than when the strip is inserted in the groove 4. Therefore, when the strip is inserted in the groove 4, the portion 11 of the strip tends to straighten more in alignment with that portion of the strip which enters the groove, hence insuring a yieldable pressure of the flange 12 upon the glass to hold it in position. In other words the combined spring actions due to the flange 12 bending at the point of the roll or arcuate curvature and the tendency of the portion 11 to straighten, insure yieldable pressure on the glass, to retain it in place.

The metal glass retaining strip has its body portion bent longitudinally, as at 10, a very slight degree adjacent the roll of the overbent flange so as to position the overbent flange in such wise that when the strip is applied, the glass, in resisting the pressure used to cause the insertion of the strip, will act to straighten the strip where it is bent slightly longitudinally.

The end portions of the flange 12 of the glass retaining strip 5 have slight extension lips 15, which overlie the rolls of the lower parts of the side strips 7 and 8. These lips 15 are designed for the purpose of guiding the lower glass retaining strip into position. For instance one end of the lower glass retaining strip is first inserted, so that the body of the strip may engage the groove 4 at one side of the sash, then the opposite end is forced into position. During the act of forcing the opposite end into position, said end is disposed so that the lip may ride against

the inner portion of the roll or arcuate portion 14 of the side strip 7, thereby guiding the lower strip into position.

After the several glass retaining strips 5, 6, 7 and 8 are disposed in place, they may be given a heavy coat of white lead, thereby filling up the groove 4 immediately adjacent the several strips as at 16, and thereby filling up the space 17 between the flanges 12 and the glass. Furthermore, this coat of white lead also fills up the crevices where the ends of the strips 5, 6, 7 and 8 connect at the corners of the sash. It has been found that coating of white lead in this manner produces a water tight glazing of the sash. For instance this construction eliminates the possibility of the water seeping through, as is the case where putty and glazier points are employed. Obviously it is unnecessary to use a hammer for forcing the strips into position, as it is only necessary to insert the body of the strips in the groove 4, then by hand, force the remaining parts of the strips into place, in such wise as to cause the flanges 12 to bear yieldably upon the glass. Obviously only one end of the lower strip 5 may have a lip 15.

The invention having been set forth, what is claimed is:—

1. In a sash glazing device, a sash having a glass receiving rabbet, the bottom of the rabbet at the top, bottom and side rails of the sash having a groove, top, bottom and side glass retaining strips engaging with said groove, the adjacent ends of the upper and side glass retaining strips being mitered, the lower ends of the side retaining strips and the ends of the lower glass retaining strip being squared, so that the lower retaining strip will hold the side retaining strips in position, each strip having an inturned yieldable flange bearing against the glass, one end of the inwardly turned flange of the lower retaining strip having a lip to engage inwardly of one of the side retaining strips to guide the lower strip into position.

2. In a sash glazing device, a sash rail having a glass receiving rabbet provided with a groove in its bottom, a glass retaining strip comprising a body engaging said groove, said strip having an overturned glass engaging flange bearing yieldably upon the glass to retain it in engagement with said rabbet, the body of the strip between where the flange curves from the strip and the edge of the strip which engages said groove being bent to cause the portion of the strip carrying the flange to incline toward the glass, thereby causing the flange to bear yieldably against the glass and retain it in position.

3. In a sash glazing device, a sash rail having a glass receiving rabbet provided with a groove in its bottom, a glass retain-

ing strip comprising a body engaging said groove, said strip having an overturned glass engaging flange bearing yieldably up on the glass to retain it in engagement with said rabbet, the body of the strip between where the flange curves from the strip and the edge of the strip which engages said groove being bent to cause the portion of the strip carrying the flange to incline toward the glass, thereby causing the flange to bear yieldably against the glass and retain it in position, and a filler coating over the strip and in the rabbet and between the flange and glass, thereby insuring a water proof connection.

4. As an article of manufacture, a sash glazing device comprising a strip having a body adapted to enter a groove in the bottom of the rabbet of the sash, the portion of the strip beyond the groove being bent longitudinally, and provided with an overturned flange to bear against the glass, the distance between the edge of said flange and the bend being greater than the distance between the face of the glass and the strip receiving groove, whereby when the strip is inserted in the groove, it insures yieldable pressure of the flange against the glass.

5. As an article of manufacture, a sash glazing device comprising a strip having a body adapted to enter a groove in the bottom of the rabbet of the sash, the portion of the strip beyond the groove being bent longitudinally, and provided with an overturned

flange to bear against the glass, the distance between the edge of said flange and the bend being greater than the distance between the face of the glass and the strip receiving groove, whereby when the strip is inserted in the groove, it insures yieldable pressure of the flange against the glass, one end of which flange having an extension lip to extend inwardly of a side glass retaining strip to hold it in position.

6. As an article of manufacture, a sash glazing device comprising a strip having a body adapted to enter a groove in the bottom of the rabbet of the sash, the portion of the strip beyond the groove being bent longitudinally, and provided with an overturned flange to bear against the glass, the distance between the edge of said flange and the bend being greater than the distance between the face of the glass and the strip receiving groove, whereby when the strip is inserted in the groove, it insures yieldable pressure of the flange against the glass, each end of said strip being mitered to fit a corresponding miter of an adjacent glass retaining strip disposed at right angles to the first strip.

In witness whereof, in the presence of two witnesses, the inventor's signature is hereunto affixed.

MILETUS B. HARRIS.

Witnesses:

E. W. EVANS,
R. W. JENKINS.