July 13, 1937. O. A. MALO 2,086,675

MULTIDUTY GLAZING STRIP

Filed April 29, 1936

Fig. 1

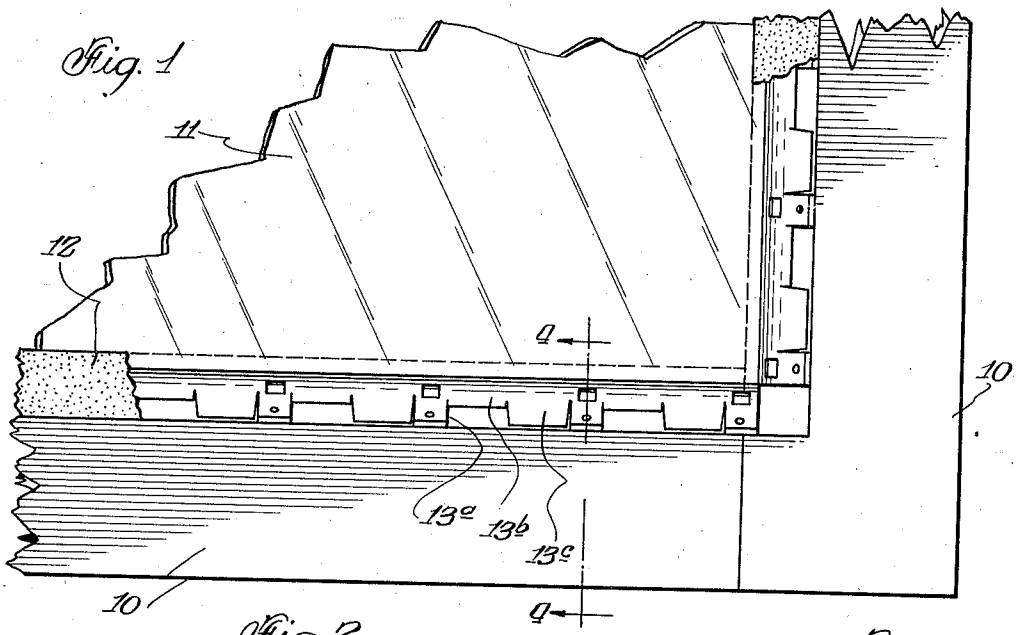


Fig. 2

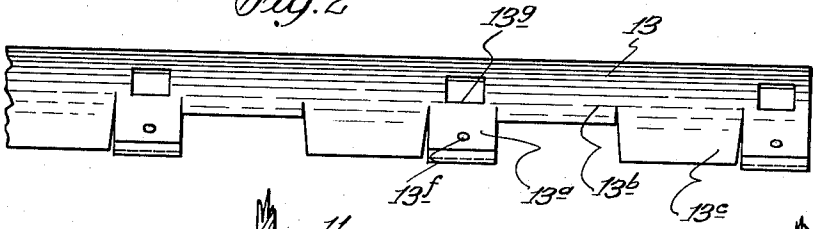


Fig. 3

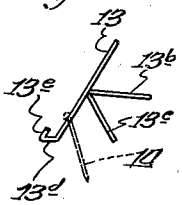


Fig. 4

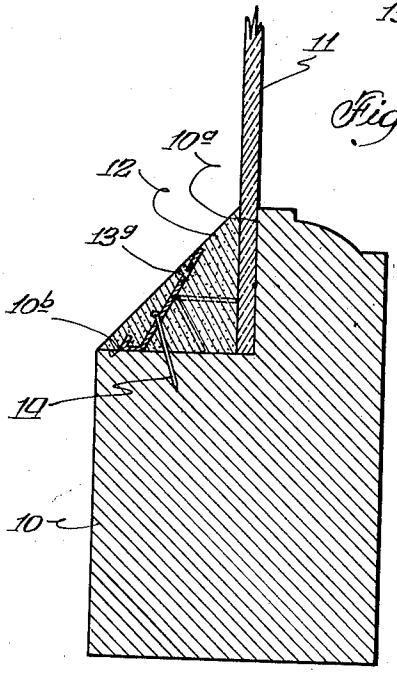
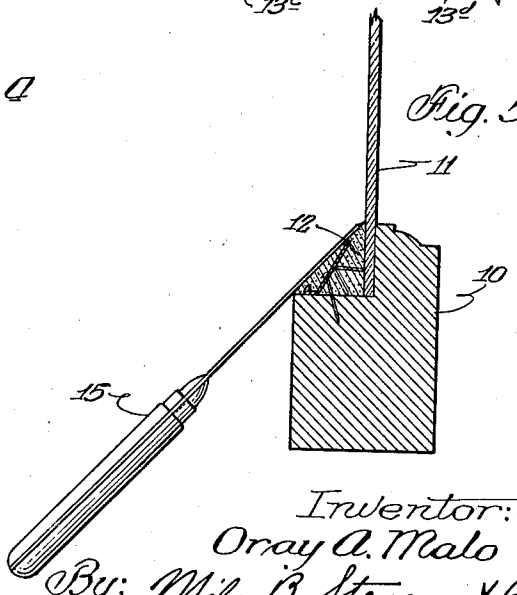


Fig. 5



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MULTIDUTY GLAZING STRIP

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Application April 29, 1936, Serial No. 77,050

10 Claims. (Cl. 20—56.4)

My invention relates to windows and more particularly to materials for the glazing of the same, and my main object is to provide a device for puttied glazing jobs in the nature of a strip which firmly secures the glass to the sash.

A further object of the invention is to so design the novel glazing strip that it reinforces and holds the putty in place at all points.

Another object of the invention is to so construct the glazing strip that it forms a guide and rest for the putty knife, enabling the putty to be fully and neatly laid.

An additional object of the invention is to design the novel glazing strip along lines of extreme simplicity, in order that it may be inexpensively manufactured and used with facility by any person desiring to re-putty or install new glass in a window.

With the above objects in view and any others which may suggest themselves from the description to follow, a better understanding of the invention may be had by reference to the accompanying drawing in which—

Fig. 1 is an elevation of a corner of a window sash showing the application of a novel glazing strip, the putty therefor being shown in part;

Fig. 2 is a front elevation of a portion of the strip.

Fig. 3 is an end view from the right hand side of Fig. 2.

Fig. 4 is an enlarged section on the line 4—4 of Fig. 1; and

Fig. 5 is a view similar to Fig. 4, showing the application of a putty knife to the glazing strip.

It is a familiar fact that window glazing jobs done with putty rarely remain tight as time goes on, the principal reason being that the putty cannot withstand the vibrations of the sash and atmospheric changes. The putty and a series of small tacks or barbs are usually depended upon to hold the glass in place until the putty sets or hardens. However, the putty may later crack or recede from the glass, so that the latter is insufficiently secured and therefore loose, even in some cases to the extent of falling out or breaking from a shock or draft. Also where this condition exists, the cracks between the putty and the glass permit water, moisture or frost to settle in the sash with the effects of loosening the putty or rotting the sash. I have therefore developed the novel glazing strip with the intention of eliminating the deficiencies related above, and providing an installation which is neat, firm, tight and permanent.

In accordance with the foregoing, specific reference to the drawing indicates the members of a window sash at 10 and the glass therefor at 11. As is the usual practice, the sash members have a backing surface 10*a* for the glass, and a ledge or shelf surface 10*b* in front of the glass for the application of the putty 12. The novel glazing strip is applicable in the region over the shelf and the puttying operation is combined with the installation of the strip.

The glazing strip is a length of zinc, copper, or other sheet metal which is not affected by water or moisture. The strip is approximately one-half inch wide and only so thick as to be firm. It is of a nature to be manufactured in lengths of one or more feet, and cut to requirements of different-sized sashes. The strip is composed of a main body section 13 which is continuous along its top portion, but divided periodically below the same. Thus, the body section has downward extensions 13*a* in the same plane and of relatively narrow dimensions. Between the sections 13*a* are sections 13*b* and 13*c*, occurring in succession. With the body of the strip inclined as indicated in Fig. 3, the section 13*b* is in the nature of a backward bend having a practically horizontal position. The section 13*c* is also a backward bend but to a lesser extent, being inclined to form a spread with the section 13*a* like the sides of an isosceles triangle. The bottom of the section 13*a* is bent forward with a horizontal foot 13*d*, the latter having a final upward bend in the nature of a hook 13*e*. The section 13*a* also has a small perforation 13*f* in the center: and above this perforation the body of the strip has a rectangular opening 13*g*.

In the application of the novel glazing strip, a suitable length thereof is placed on the shelf 10*b* in the manner shown in Figs. 1 and 4, whereby to have the bends 13*b* meeting the glass 11 and the bends 13*c* resting on the shelf 10*b*. The strip is now secured by driving brads 14 through the perforations 13*f* in the sections 13*a* into the stock of the sash members. Then the putty is spread on the strip and pressed with a putty knife to force it through the openings in the strip and over the top of the same so as to completely fill the entire space behind the strip. By passing the putty knife along the top edge of the strip and the corner of the shelf 10*b* the outer or frontal surface of the putty is finished in neat form and with a straight top edge.

In considering the function of the glazing strip and its formation, it may be generally assumed that the body of the strip forms a metallic reinforcing core for the putty. With the strip nailed

down as mentioned, the series of back bends *13b* meeting the glass forms direct retainers to hold the same firmly to the sash. The series of down bends *13c* constitutes so many props to combine with the sections *13c* to firmly seat the strip on the shelf and check tendencies to collapse, warp or otherwise deform the strip. The horizontal base portions *13d* combine to form a flat heel to resist tendencies from window shock or vibration to swing the strip forward or away from the glass with the brad heads as a pivot and so weaken the retentive value of the bends *13b*. It is seen that the body of the strip and the bends *13b* form an undercut lock for the rear portion of the putty. Likewise, the hook *13e* forms an anchoring lock for the forward portion of the putty as clearly understood from Fig. 4, so that those parts of the putty which mostly receive dislodging or straining tendencies are firmly retained by the strip. Finally, the top edge of the strip forms a guide for the putty knife in the manner seen in Fig. 5 so that no particular skill is necessary to form a neat frontal surface or finish for the putty and a top edge which is straight and not visible from the inner side of the window. Incidentally, the outer portion of the putty forms a bond with the inner one by way of the openings *13g* and those formed by the bends *13b* and *13d* causing the putty to become inseparably locked to its metallic core.

In case a window pane secured by the reinforced putty mounting described above is to be replaced or re-puttied, the old putty mounting is easily removed by prying it up along its course with a screw driver, chisel or other flat-pointed tool.

It will be evident from the above description that the novel glazing strip performs a multiduty service in keeping with its title. Yet, the strip may be stamped in one piece from ribbon metal by suitable forms or dies and with very little loss or waste. It is noted that the hook *13e* is parallel with the body of the strip in order to release the end of a forming die. It is easily conceivable that the strip may therefore be manufactured so inexpensively as to be conveniently purchasable by home owners, building agents, glazers and janitors having charge of general repairs.

While I have described the novel glazing strip along specific lines, it will be understood that the same is capable of various minor changes and refinements without departing from its principle as represented in the appended claims, and I consider all such changes and refinements as coming within the scope and spirit of the same.

I claim:—

1. A reinforcing core for puttied glazing comprising, a strip of flat ribbon metal with spaced portions along one side formed as longitudinally divided pairs of back bends, one bend of each pair being angularly obtuse and the other acute from their source, and the remaining sections of the strip intermediate said portions being extended from their outer edge with an obtuse forward bend and a terminal return bend, the latter bend being in a plane parallel to the strip.

2. The structure of claim 1, the strip being perforated with relatively large openings near its other side opposite said remaining sections, and with small openings at medial points in the latter.

3. A reinforcing core for puttied glazing comprising, a strip adapted to be erected in a longitudinal standing position upon a glazing supporting shelf adjacent said glazing, and struck out portions of said strip extending from points substantially midway between the top and bottom of said strip and adapted to engage said glazing at substantially right angles thereto.

4. A reinforcing core for puttied glazing comprising, a strip adapted to be erected in a longitudinal standing position upon a glazing supporting shelf adjacent said glazing, struck out portions of said strip extending rearwardly therefrom, the free edge of at least one of said portions being adapted to engage said shelf at a point rearwardly of the bottom edge of said strip.

5. A reinforcing core for puttied glazing comprising, a strip adapted to be supported in a longitudinal standing position upon a glazing supporting shelf adjacent said glazing, said strip being inclined towards said glazing but having its upper edge spaced therefrom, a tongue struck out of the lower portion of said strip and bent back therefrom to an angle imparting to said strip and said tongue a substantially isosceles formation in relation to said shelf.

6. A reinforcing core for puttied glazing comprising, a strip adapted to be supported in longitudinal standing position upon a glazing supporting shelf adjacent said glazing, said strip being adapted to be covered by a body of putty applicable to the same, and the upper edge of said strip being substantially straight and being adapted to serve as a guide for a putty knife in defining the outer limits of the body of putty.

7. A reinforcing core for puttied glazings comprising, a strip adapted to be supported in longitudinal standing position upon a glazing supporting shelf adjacent said glazing, said strip being adapted to be covered by a body of putty applicable to the same, the upper edge of said strip being substantially straight and being adapted to serve as a guide for a putty knife in defining the outer limits of the body of putty, and struck out portions of said strip extending from points substantially midway between the top and bottom of said strip and adapted to engage said glazing at substantially right angles thereto.

8. A reinforcing core for puttied glazings comprising, a strip adapted to be supported in longitudinal standing position upon a glazing supporting shelf adjacent said glazing, said strip being adapted to be covered by a body of putty applicable to the same, the upper edge of said strip being substantially straight and being adapted to serve as a guide for a putty knife in defining the outer limits of the body of putty, struck out portions of said strip extending rearwardly therefrom, the free edge of at least one of said portions being adapted to engage said shelf at a point rearwardly of the bottom edge of said strip, and the free edge of at least another of said portions being adapted to engage said glazing at substantially right angles thereto.

9. The structure of claim 6, said strip being inclined toward said glazing but having its upper edge spaced therefrom, a tongue struck out of the lower portion of said strip, said tongue being bent back therefrom to an angle imparting to said strip and said tongue a substantially isosceles formation in relation to said shelf.

10. The structure of claim 6, and said strip being formed to provide a plurality of openings therein to permit the passage of putty therethrough.

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