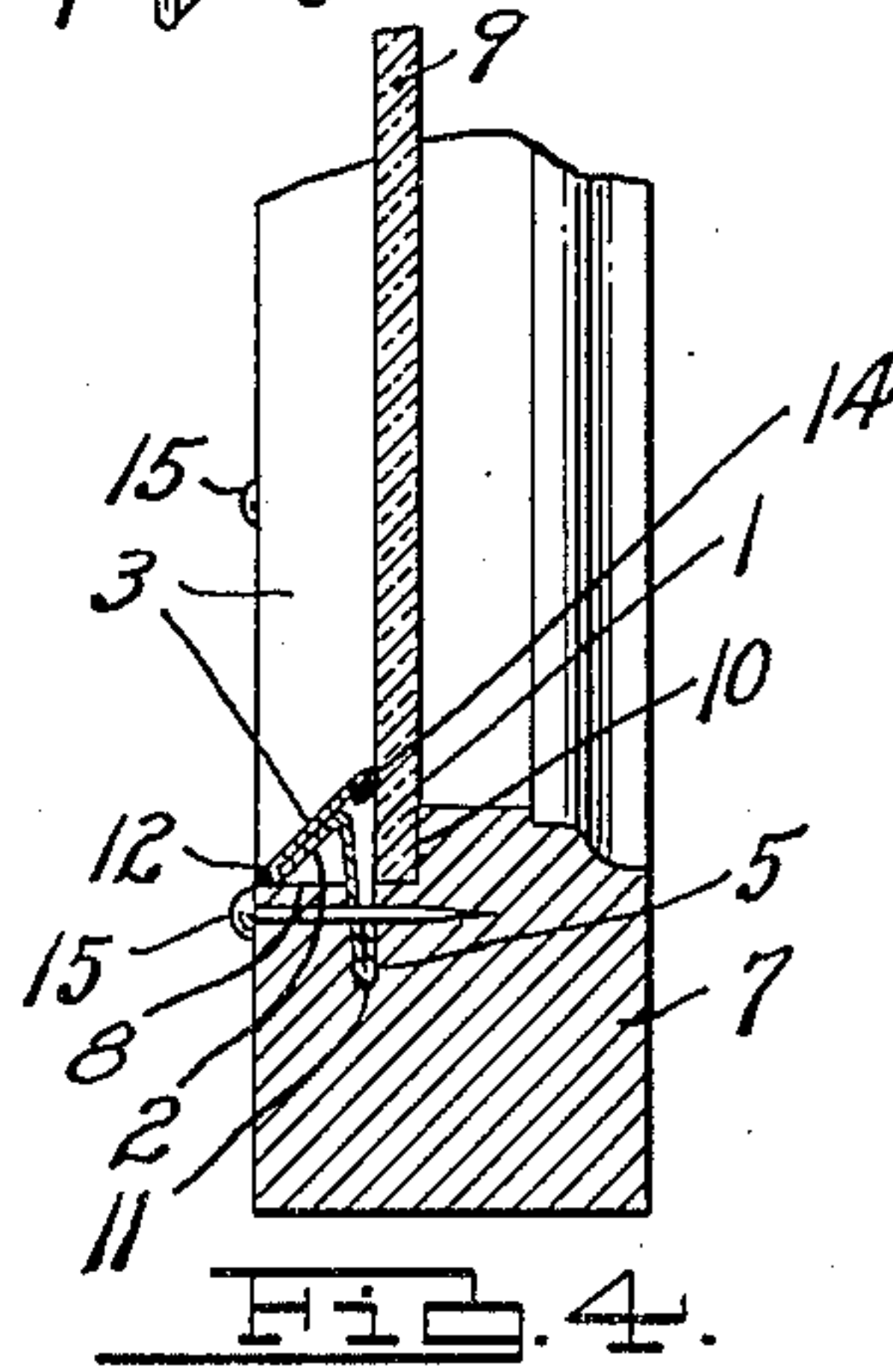


2,125,394

Filed Nov. 9, 1936



BY

Julius C. Nevendorf

Emus B. Wisner
ATTORNEY.

UNITED STATES PATENT OFFICE

2,125,394

METAL SASH STRIP

Julius C. Neuendorf, Detroit, Mich.

Application November 9, 1936, Serial No. 109,848

5 Claims. (Cl. 20—56.4)

This invention relates to metal sash strip and the object of the invention is to provide a spring metal sash strip arranged to be installed in a sash to hold the glass panes in place therein and eliminate the use of putty.

Another object of the invention is to provide a metal sash strip having an upright portion adapted to be secured in a groove in the sash and having a spring flange provided with a return bent portion extending at an angle to and yieldably engaging the glass pane to hold it in the sash.

Another object of the invention is to provide a metal sash strip having seamed edges so as to give a smooth contact surface and provided with a return bent angular flange adapted to form an angle between the glass pane and the edge of the sash.

A further object of the invention is to provide a metal sash strip which may be very readily secured in place and which when so secured provides a neat finish bevel between the glass and the edge of the sash.

A further object of the invention is to provide a spring metal sash strip comprising an upright portion having an angular flange and said flange being provided with a return bent spring metal portion extending beyond the upright portion and arranged to engage the glass pane.

These objects and the several novel features of the invention are hereinafter more fully described and claimed and the preferred form of construction by which these objects are attained is shown in the accompanying drawing in which—

Fig. 1 is a fragmentary view of a sash showing my improved metal sash strips mounted therein.

Fig. 2 is a similar view showing one corner of a sash with the sash strips mounted therein.

Fig. 3 is a section taken on line 3—3 of Fig. 1.

Fig. 4 is a section taken on line 4—4 of Fig. 2.

Fig. 5 is a perspective view of the spring metal sash strip itself.

The strip itself is shown more particularly in Fig. 5 and comprises an upright or vertical portion 1 having an angular flange 2 extending at an acute angle to the upright portion 1 and having a return bent flange 3 in contact with the flange 2 and extending at the same angle as the flange 2. The free edge of this return bent flange 3 extends beyond the upright portion 1 to form an obtuse angle therewith and is provided with an inturned or seamed edge 4 which is turned under to provide a smooth contact edge 14 for engaging the glass. Also, to prevent sharp

edges, the lower edge of the upright portion 1 is provided with a return bent flange 5 forming a smooth seamed edge as shown and the upright portion 1 is provided with nail holes 6 for attaching the metal sash strip in the sash.

As shown in Figs. 1, 2 and 4, the sash 7 is provided with a shoulder 8 to receive the glass pane 9 and this glass pane 9 engages against the shoulder 10 formed therefor in the sash. A groove 11 is formed in the sash 7 and extends downwardly from the shoulder 8 and is arranged to receive the lower edge of the upright portion 1 of the metal sash strip. This is pressed down into the groove 11 until the return bent edge 12 of the sash strip engages the shoulder 8 while the seamed edge 14 engages the face of the glass pane 9. While held in this position, nails 15 are driven through the sash and through the apertures 6 in the metal sash strip to firmly secure it in place. When so secured, the seamed edge 14 engages the glass pane 9 with a spring tension which will firmly hold the glass pane 9 in position and the further the upright portion 1 is pushed down into the slot 11 the greater this spring tension will be.

The metal sash strip is preferably formed of spring bronze or other suitable metal which has inherent springiness so as to firmly engage the glass and hold it in place. The return bent flange 3 of this strip may be painted with the remainder of the sash and will provide a very neat and even bevel between the sash and glass which will not have the irregularities usually produced with putty. Another advantage of my metal sash strip is that it will overcome the difficulties had with putty cracking and falling out of the sash.

If desired, the seamed edge 14 may be coated with a cement, paint or rubber compound so that when the metal sash strip is secured in place, a seal will be formed between the edge 14 and the glass pane 9. If the glass pane 9 should become broken, the nails 15 may be pulled out to allow removal of the metal sash strips, at which time, a new pane 9 may be inserted in position and the metal sash strips again secured in place in the sash by the nails 15. The sash strips may also be readily fitted together at the corners as shown in Figs. 1 and 2 and the completed sash will present a much more finished appearance than a sash in which the glass is secured in place by putty.

In Figs. 1 and 3 I have also illustrated a metal sash strip for a sash mullion. In this case, the sash mullion 16 does not provide sufficient mate-

rial into which grooves 11 may be cut. For this construction, a sash strip is provided comprising a U-shaped portion 17 fitting over the mullion 16 and secured in position by screws 18 and on each side of the U-shaped strip is a return bent flange 19 which terminates in an angular flange 20 extending at an angle into contact with the glass pane 9. The edge of the flange 20 may be provided with a seamed edge similar to the edge 14 shown in Fig. 5, if desired.

In this construction, the flanges 20 are preferably bent at a slightly more acute angle than desired so that as the screws 18 are turned up the flanges 20 are pressed outwardly by the glass to the position shown in Fig. 3. This produces a spring tension against the glass panes 9 which will firmly engage and hold the glass panes in position.

From the foregoing description it becomes evident that the device is very simple and efficient in operation, may be quickly and easily installed in a sash, provides a neat finished appearance not obtainable with putty, will not deteriorate with age and provides a device which accomplishes the objects described.

Having thus fully described my invention, its utility and mode of operation, what I claim and desire to secure by Letters Patent of the United States is—

1. In a metal sash strip, the combination with a sash having a shoulder to receive a glass pane and provided with a groove in the shoulder in front of the glass pane, a sheet metal strip formed of spring metal and having an upright portion fitting in said groove, a flange extending from one side of said upright portion and at an acute angle thereto into engagement with said shoulder, said flange being provided with a portion return bent into engagement with the flange and providing a free spring edge extending beyond the upright portion into engagement with the glass pane and means for securing the upright portion in the groove.

2. In a metal sash strip, a sheet metal strip formed of spring metal and having an upright portion provided with a return bent lower edge, the upper edge of the upright portion being provided with an out-turned longitudinal flange extending at an acute angle to the upright portion, the said flange being provided with a portion return bent into engagement with the flange and providing a free spring edge extending beyond the side of the upright portion opposite the flange and forming an obtuse angle therewith.

3. In a metal sash strip, a sheet metal strip formed of spring metal and having an upright portion provided with a flange on one side extending at an acute angle to said upright portion, the said flange being provided with a return bent portion extending over the flange and in contact therewith, the return bent portion extending beyond the upright portion and forming an obtuse angle with the side of the upright portion opposite the flange to provide a free spring edge.

4. In a metal sash strip, a sheet metal strip having an upright portion provided with a flange extending at an acute angle to said upright portion, said flange terminating in a portion return bent into engagement with the flange and providing a free spring edge extending thereover and beyond the upright portion, the extending edge of the return bent portion forming an obtuse angle with the side of the upright portion opposite the flange.

5. In a metal sash strip, a sheet metal strip having an upright portion provided with a flange extending at an acute angle to said upright portion and having a portion return bent into engagement with the flange and providing a free spring edge extending beyond the upright portion on the side opposite the flange.

JULIUS C. NEUENDORF.