Sept. 1, 1936. E. F. TANNEWITZ 2,052,585

WINDOW MOUNTING

Filed Feb. 8, 1933

Fig. 1.

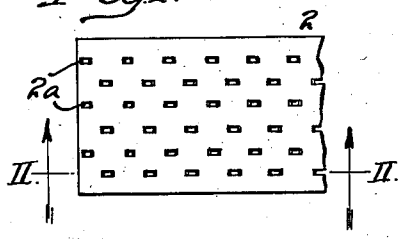


Fig. 2.



Fig. 3.

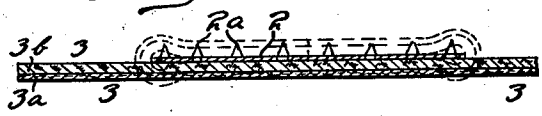


Fig. 4.

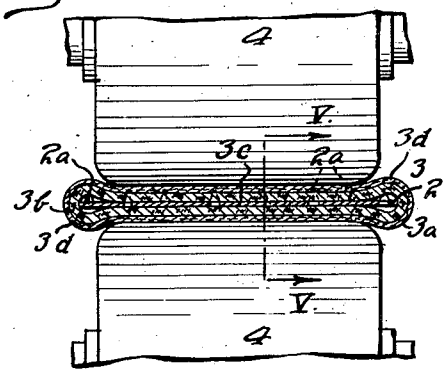


Fig. 5.

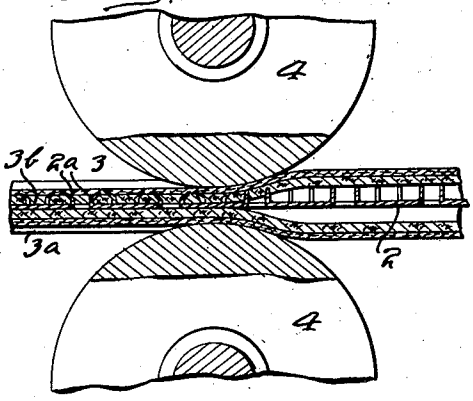


Fig. 6.

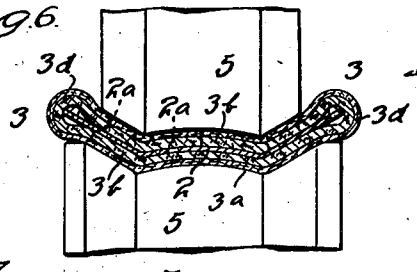


Fig. 7.

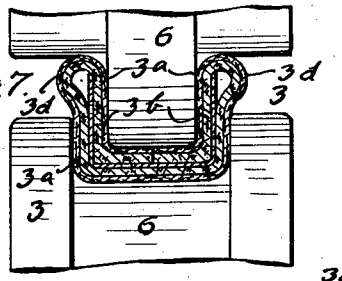


Fig. 8.

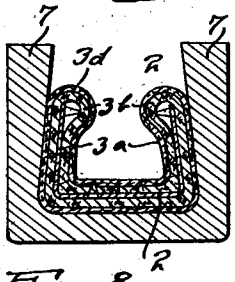
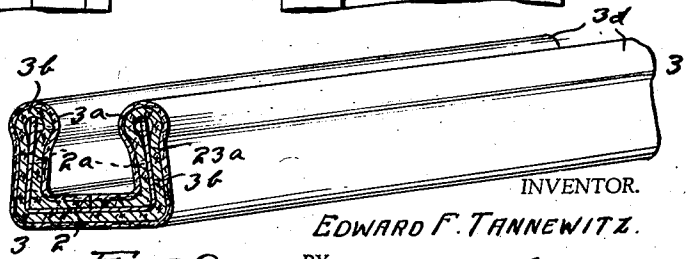


Fig. 9.



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2,052,585

WINDOW MOUNTING

Edward F. Tannewitz, Detroit, Mich., assignor to The Detroit Gasket and Manufacturing Company, Detroit, Mich., a corporation of Michigan

Application February 8, 1933, Serial No. 655,830

9 Claims. (Cl. 296—44.5)

My invention relates to a unitary or preformed window mounting such as shown in my Patent Number 1,670,321 of May 22, 1928, and the objects of my improvements are to reduce the cost of manufacturing the same and to produce a better article.

I accomplish this object in the way and by the means illustrated in the accompanying drawing, in which:—

Figure 1 is a plan view of a portion of a metal strip forming a part of the constructed article.

Figure 2 is a section on the line II—II, Figure 1.

Figure 3 is a sectional elevation showing the strip of Figures 1 and 2 lying upon a composite strip in the position in which said strips are placed in the process of forming the completed article.

Figure 4 is an elevation of a part of two rolls with the combined strips shown in section between them.

Figure 5 is a sectional elevation on the line V—V, Figure 4.

Figure 6 is an elevation of part of two rolls with the combined strip between them illustrating a second step in the formation of the channel strip.

Figure 7 is a view similar to Figure 6, illustrating a third step in the process of forming the channel strip.

Figure 8 is a sectional elevation of a die with the combined strip therein being drawn through to form the channel strip.

Figure 9 is a perspective view of part of the completed channel strip.

2 is a metal strip, a part only of which is shown. This strip is of thin sheet steel and may be readily bent. 2*a* indicate spurs that are struck up in staggered rows from the sheet metal of the strip 2. Apertures through the strip are left when the spurs 2*a* are struck up.

3 is a composite strip such as is shown in my application filed July 7, 1932, and having the Serial Number 621,221 and consists of a sheet of felt or preferably a cloth fabric 3*a* covered upon one side with an adhering cork lining 3*b* constituting a thin laminated facing. The metal strip 2 is placed in the center of the strip 3, upon the cork lined side thereof, with the spurs 2*a* extending upward. The portions of the strip 3 beyond the edge of the strip 2 are then turned over upon the latter, as indicated in broken lines in Figure 3, and the strips thus formed are passed between rollers 4, 4, as indicated in Figures 4 and 5, thus forcing the spurs 2*a* into the material of the cork lining 3*b*, i. e., the said turned over portions beyond the edge of strip 2.

The combined strips are then passed through the rollers 5, 5 to shape them in cross section as shown in Figure 6. After having been passed through rollers 6, 6 to form them into the cross section shown in Figure 7, the combined strips are drawn through the die 7, 7, as shown in Figure 8, which forms them into the completed unitary or preformed channel strip illustrated in Figure 9, fitting against the inner surface of the channel which is of less width at its upper face than at its bottom. As will be noted the metal is enclosed in the superposed cushion and fabric material layers and does not contact with the groove in which the channel is housed. As shown in Figure 9, the entrance opening of the channel recess of the composite strip is reduced relative to the width of said recess.

The projections 2*a* are substantially of a size not to pierce the felt or cloth and are bent over or slightly deformed so as to clinch the cork to the metal.

The upper edges of the completed strip are somewhat enlarged in cross section forming beads and a space may be left within them between the metal member and the adjacent surface of the cork which gives a certain resiliency and flexibility to the edge portions which are enlarged and contact with the glass.

The metal insert perforated as described may be permanently bent to a desired form, and imparts resiliency to the window mounting, and strengthens and sustains the same, at the time being cooperable with the cork and cloth to permit the mounting to be easily deformed without breakage or disruption, and the entire mounting is flexible and resilient.

While I have in the claims specified fabric and cork as the materials of the composite strip, the claims are to be understood as also covering equivalent materials, and where I speak of the engagement of the felt and metal strip it is to be understood as including a direct engagement or an engagement through an intermediary as the cork lining unless otherwise specified.

I claim:—

1. A unitary preformed channel strip consisting of a strip of metal having spurs therein, and a composite strip of fabric lined with cork, the composite strip enclosing and being folded over the edges of the metal strip and the spurs of the metal strip engaging the cork of the folded over portion of the composite sheet, without extending to the outer surface thereof, to prevent relative motion of the contiguous surfaces of the strips.

2. A unitary preformed channel strip consisting of a strip of metal and a composite enclosing

strip of fabric lined with cork the metal strip having spurs engaging the cork of the composite strip without extending to the outer surface thereof to prevent relative motion of the contiguous surfaces of the strips.

3. A unitary preformed channel comprising an inner layer of metal having upstruck projections formed thereon, an enclosing layer of cushion material united to said metal layer having the projections of the metal layer embedded therein, and an enclosing layer of fabric united to said cushion layer.

4. A unitary preformed channel comprising an inner layer of metal having upstruck projections formed thereon, an enclosing layer of cushion material united to said metal layer and having te projections of the metal layer embedded therein, and an enclosing layer of fabric united to said cushion layer, said layers of cushion material and fabric adjacent the edges of said metal layer having portions spaced from the metal layer and forming beads.

5. A unitary preformed channel strip consisting of a strip of metal having spurs therein, and a composite strip of fabric lined with cushion material, the composite strip enclosing and being folded over the edges of the metal strip and the spurs of the metal strip engaging the cushion material of the folded over portion of the composite sheet, without extending to the outer surface thereof, to prevent relative motion of the contiguous surfaces of the strips, said channel having the recess therein reduced at its entrance portion.

6. A unitary preformed channel strip consisting of a strip of metal and a composite enclosing strip of fabric lined with cushion material the metal strip having spurs struck therefrom and clinching the cushion material of the composite strip without extending to the outer surface thereof to prevent relative motion of the contiguous surfaces of the strips.

7. The method of making channel material which comprises superposing layers of fabric, cushion material and metal, the latter having upstruck projections therein, folding the layers of fabric and cushion material over said metal layer and embedding the projections in said cushion material layer, loosely associating the end portions of the folded over layers with said metal layer, and subjecting the composite materi.. to a forming operation and forming said loosely associated portions into beads.

8. The method of making channel material which comprises superposing layers of fabric, cushion material and metal, the latter having upstruck projections therein, folding the layers of fabric and cushion material over said metal layer and embedding the projections in the folded over portions of the cushion layer at one side of the metal layer, and subjecting the composite material to a forming operation.

9. A unitary channel strip comprising a strip of metal and a composite enclosing strip of distinct layers of fabric and cushion material connected together, the metal strip having projections embedded in the cushion material of the composite strip for preventing relative motion of the contiguous surfaces of the strips.

EDWARD F. TANNEWITZ.