Nov. 27, 1934. C. F. SCHLEGEL 1,982,074

WINDOW CHANNEL

Filed Aug. 6, 1934

Fig. 2

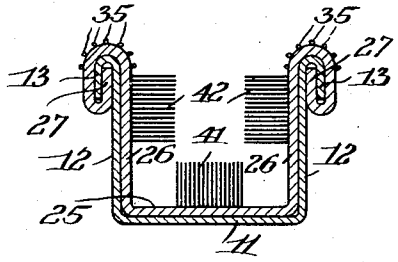


Fig. 1

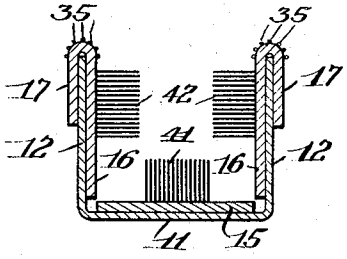


Fig. 3

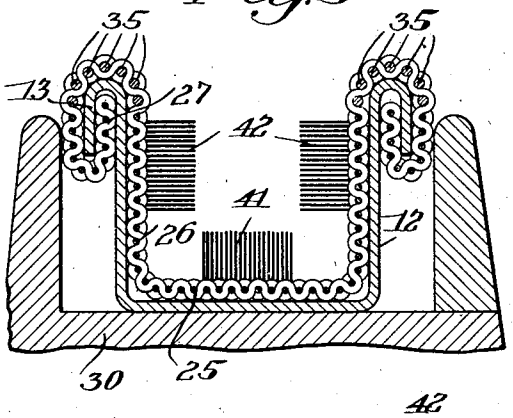


Fig. 4

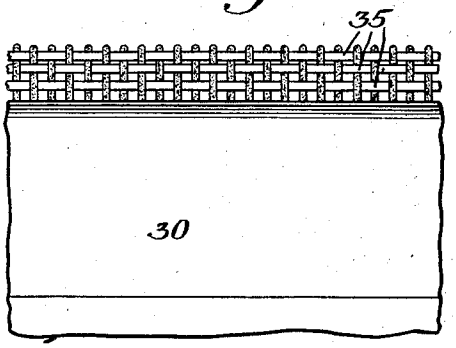


Fig. 6

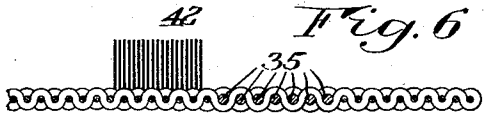
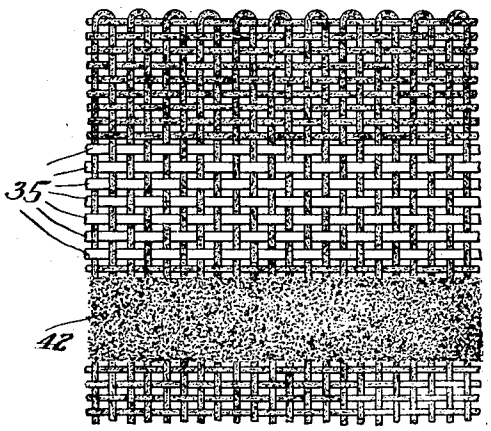


Fig. 5



INVENTOR
Carl F. Schlegel
BY Edward K. Cumpston
his ATTORNEY

Patented Nov. 27, 1934 1,982,074

UNITED STATES PATENT OFFICE

1,982,074

WINDOW CHANNEL

Carl F. Schlegel, Rochester, N. Y., assignor to The Schlegel Manufacturing Company, Rochester, N. Y., a corporation of New York

Application August 6, 1934, Serial No. 738,642

6 Claims. (Cl. 296—44.5)

This invention relates to window channels such as are used for guiding or mounting window glass, whether fixed or movable, especially in vehicles, such, for example, as automobiles, motorboats, and aircraft.

An object of the invention is to provide a generally improved and more satisfactory window channel.

Another object is the provision of a window channel of attractive appearance which can be manufactured relatively cheaply and easily.

To these and other ends the invention resides in certain improvements and combinations of parts, all as will be hereinafter more fully described, the novel features being pointed out in the claims at the end of the specification.

In the drawing:

Fig. 1 is a diagrammatic cross section through a window channel constructed in accordance with one embodiment of the invention;

Fig. 2 is a similar view showing a slightly different embodiment;

Fig. 3 is a view of the form of channel shown in Fig. 2, on a somewhat larger scale, illustrating it placed in a window frame in normal position for use;

Fig. 4 is a side view of the structure shown in Fig. 3;

Fig. 5 is a diagrammatic plan of part of the lining material used in the window channel, and

Fig. 6 is a cross section through the material shown in Fig. 5.

The same reference numerals throughout the several views indicate the same parts.

The window channel comprises a suitable structure formed into channel shaped or generally U-shaped cross section so as to embrace one edge of a window glass or the like. The channel shaped structure may include a channel shaped member having a bottom 11 and side walls 12, and this member may be of any suitable known form, either rigid or flexible. For example, if it is of the rigid variety, the portions 11 and 12 may be made of sheet metal.

This channel shaped body is provided with a lining formed by one or more pieces of woven textile material which may be cemented, clamped, riveted, or otherwise affixed to the channel shaped body. In Fig. 1, the lining is shown as formed of three separate strips, a bottom piece 15 lying against the inner surface of the bottom portion 11 of the channel body, and two side pieces 16 each lying along the inner surface of one of the side walls 12 and wrapped around the outer edge of its side wall and extending back some distance on the outer surface thereof as at 17. The textile strips 15 and 16 are cemented or otherwise suitably secured to the walls of the channel shaped body.

In Fig. 2, there is shown a slightly different form, in which the textile lining is in a single strip instead of three separate strips, the single strip having one portion 25 lying on the bottom of the channel and two side portions 26 lying against the inner surfaces of the side walls 12. In this embodiment, the side walls 12 are doubled back upon themselves at 13 and the side portions 26 of the textile material, after being folded around the outer edges of the channel, have their edges 27 tucked in between the portions 12 and 13 and clamped thereby. When the textile material is held in this manner, the cementing of it to the U-shaped body may be omitted under some circumstances.

In whichever form the channel may be constructed, it is ordinarily used by being placed in a groove or rabbet of a window frame 30, indicated diagrammatically in Fig. 3, with the outer edges of the channel usually somewhat exposed, as shown in that figure.

According to the present invention, the textile material is mainly of non-metallic strands (cotton or linen, for example) but it has woven into it, as an integral part thereof, one or more warp strands of metallic wire, placed in the textile material in position to run substantially along the outer edges of one or both side walls of the channel. Preferably several such wires may be employed along each edge, such wires being shown diagrammatically at 35 in Figs. 1 and 2, and also being indicated by the same numeral in Fig. 3, in which, for the sake of contrast, the metallic wires 35 are shown of somewhat larger size than the other or non-metallic warp strands. Actually the wires may be of the same size as other warp strands, or larger or smaller than them, as desired. Ordinarily it is preferred, however, to have the wires somewhat larger than the non-metallic warp strands and to have several wires side by side adjacent each other, without any non-metallic warp strands interposed between them, so that they will show up well and give a decorative metallic appearance to the exposed forward edges of the channel.

A fragment of the textile lining material, laid out flat, is shown diagrammatically in Fig. 5, in which the metallic warp strands are shown plain, and the non-metallic warp strands and weft strands are shown somewhat stippled, for the sake of contrast. It will be seen from Fig. 5

that the metallic warp strands as a group show up well, and this is true of the actual article made in accordance with this invention.

The metallic warp strands may be of any suitable kind of wire, conveniently being made of wire manufactured from what is commonly known as stainless steel, which has and which will retain a bright, shiny appearance. Various compositions of stainless steel are well known in the metallurgical art and need not be given in detail here. One kind of stainless steel commonly used is a steel alloy containing about 18% of chromium and about 8% of nickel.

The wires not only enhance the appearance of the completed channel in use and give it a decorative edge, but also serve to stiffen the outer edges of the channel and hold them in true alinement, this being particularly useful when the channel body is quite flexible rather than rigid or semi-rigid. Thus no metallic bead running along the edge of the channel, as used in some prior constructions, is needed on the present channel, in which the wire warp strands give adequate stiffening and decoration without the expense and added weight of the bead.

If desired, the wires may be enameled or otherwise colored to harmonize with the other interior trim of the vehicle on which the channels are to be used, or to carry out any desired scheme of color decoration.

The channel is provided with any suitable cushioning means for cushioning the glass embraced by the channel, which cushioning means is preferably woven into or onto the textile material to form an integral part thereof. While the cushioning means may be of any suitable known form, it is ordinarily preferred to make it in the form of relatively long stiff pile, as disclosed, for example, in Schlegel Patent No. 1,847,700, granted March 1, 1932, and the cushioning means in the present instance is illustrated diagrammatically as such long stiff pile, there being one line 41 of such cushioning pile running along the bottom interior surface of the channel and other lines 42 thereof, one on the inner surface of each side wall of the channel.

I claim:

1. A window channel comprising a textile portion formed of warp strands and weft strands interwoven with each other, said warp strands including a plurality of at least partially visible strands of metallic wire.

2. A window channel comprising a generally U-shaped body including a woven textile portion having a plurality of warp strands of metallic wire running substantially along one edge of said U-shaped body.

3. A window channel comprising a generally channel shaped structure including a strip of textile material having warp strands and weft strands interwoven with each other, a plurality of adjacent warp strands being of metallic wire and being located in position to run substantially along an outer edge of one side wall of said channel shaped structure.

4. A window channel comprising a generally U-shaped member, and a lining of woven textile material applied to at least a part of the interior surface of said member and wrapped around an outer edge of one side wall thereof, said textile material including a warp strand of metal running substantially along said outer edge.

5. A window channel comprising a generally U-shaped member, a lining of woven textile material applied to at least a part of the interior surface of said member and wrapped around an outer edge of one side wall thereof, said textile material including a plurality of strands of metallic wire woven into and forming a part of said textile material in position to run along said material substantially at said edge around which said material is wrapped, and cushioning means formed on and woven integrally with said textile material for cushioning a window embraced by said channel.

6. A window channel comprising a generally U-shaped member, one or more strips of woven textile material forming a lining for the interior surface of said member and wrapped around the outer edges of the side walls thereof, and warp strands of metallic wire woven into said textile material and running along that part of said material which is wrapped around said outer edges to lend a decorative appearance to the outer edges of the channel.

CARL F. SCHLEGEL.