

May 29, 1934.

P. N. MILLER ET AL

1,960,949

UPHOLSTERY AND SECURING MEANS THEREFOR

Filed Sept. 24, 1931

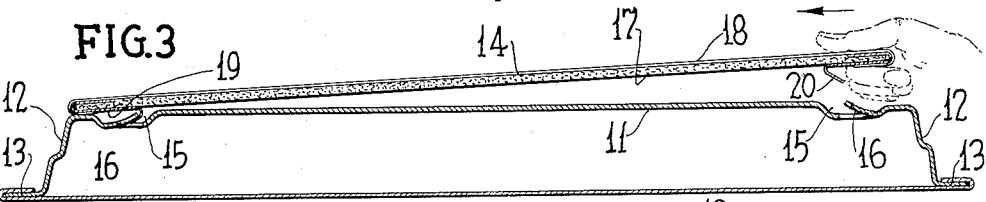
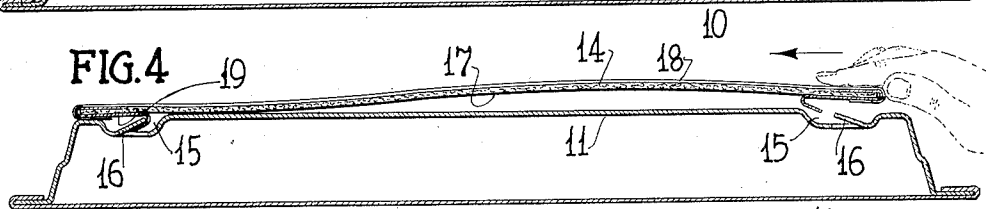
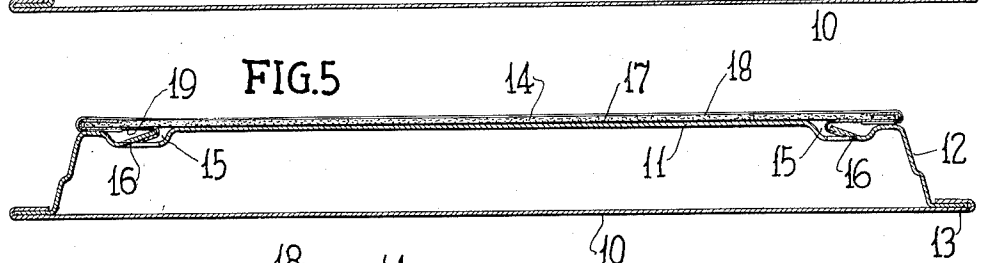
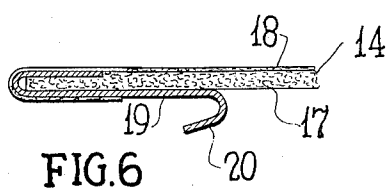
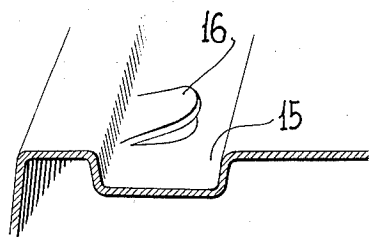


FIG.2

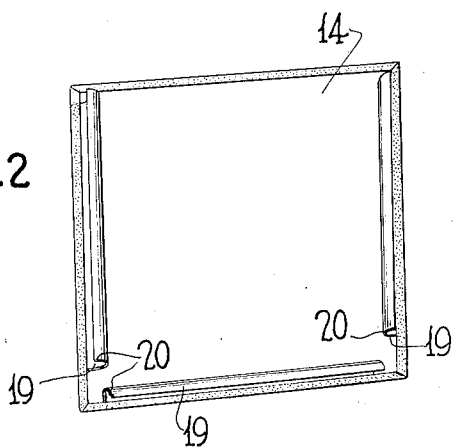
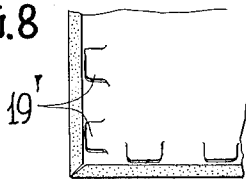
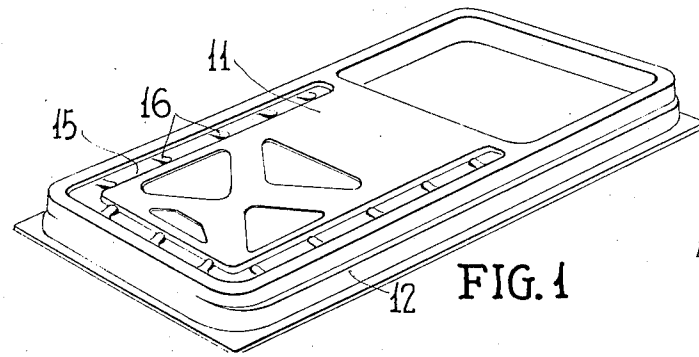


FIG.8



INVENTORS.
GEORGE TRAUTVETTER
PEARLE N. MILLER
BY *John P. Parbo*
ATTORNEY.

UNITED STATES PATENT OFFICE

1,960,949

UPHOLSTERY AND SECURING MEANS
THEREFOR

Pearle N. Miller, Detroit, Mich., and George Trautvetter, Philadelphia, Pa., assignors to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a corporation of Pennsylvania

Application September 24, 1931, Serial No. 564,736

6 Claims. (Cl. 296—44)

The invention relates to automobile body walls and particularly to the attachment of upholstery pads to the inside walls thereof.

It is an object of our invention to provide an upholstery pad which can be readily stacked in its finished state ready for application and to provide means on said pad and the wall to which it is to be attached whereby the same can be readily applied without the use of separate fastener means and in which the fastening will be wholly concealed by the pad.

To this end the upholstery pad is provided along its edges with metal clips having a hooked portion adapted to coact with integral tabs struck out from the metal of the inner panel or framework of the part of the body to be upholstered.

Other objects and advantages and the construction whereby they are attained will become apparent from the following detailed specification when read in connection with the drawing forming a part hereof.

In the drawing,

Fig. 1 is a perspective view of a door to which the invention is shown applied, as it appears prior to the application of the upholstery pad.

Fig. 2 is a similar view of an upholstery pad according to the invention.

Figs. 3, 4 and 5 are cross sectional views showing a manner in which the upholstery pad may be applied, Figures 3 and 4 showing successive steps in the application, and Figure 5 showing the final assembly of the parts.

Figs. 6 and 7 are fragmentary detail views on an enlarged scale, respectively, of the edge of the upholstery pad and of the door edge.

Fig. 8 is a fragmentary perspective view similar to Fig. 2 showing a slightly modified construction.

In the embodiment of the invention selected for illustration, the door to which the invention is shown applied is constructed mainly of two sheet metal panels, the outer panel 10 and the inner panel 11, the latter of which forming the transverse rails 12 of the door over the outwardly extending edge flange 13 of which the outer edges of the outer panel 10 are crimped and secured in the usual way.

In order to provide room for the fastening means which avoids interference with the flat seating of the upholstery pad, designated as a whole by reference numeral 14, against the inner panel, the inner panel is provided in the regions where the improved fastening means is to be used, as at the sides and bottom of the door, with

shallow depressions 15 adjacent the edge of the door, in this instance, running all the way around the sides and bottom of the panel 11 below the window opening. In these depressed portions 15, the metal of the panel is formed with spaced struck-out tabs 16, which project inwardly and laterally away from the edge of the door. These tabs are thus protected in large measure against deformation in the handling and shipping of the doors prior to the assembly of the upholstery therewith due to their location within the depressed portions 15 of the panel 11.

The upholstery pad is constructed in the usual manner of a stiff cardboard or other backing 17 shaped to fit the edges of the door, covered by an upholstery fabric 18, which is drawn over the edges of the backing and glued or otherwise secured in a usual manner along its edges to the rear of the backing.

Prior to the application of the upholstery fabric over the edges of the backing, metal strips 19 having their outer edges reversely bent over the side and bottom edges of the backing 17 are securely crimped down upon the backing as shown to firmly secure them thereto. These metal strips 19 have their inner edges reversely bent at 20 into hook-shaped section, these hook-shaped portions 20 cooperating with the tabs 16, in the final assembly to hold the pad securely in place.

The pad may readily be applied by first placing it in position against the panel with the lower edge thereof a slight distance above the lower edge of the door, so that the hook-shaped portion 20 of the lower strip 19 is above the series of tabs across the bottom of the door out of engagement therewith.

The pad is then placed with the hooked portion 20 of one side strip 19 engaging under the tabs 16 at one side of the door as shown in Fig. 1, after which the pad is flexed outwardly, as shown in Fig. 2 to permit the hooked portion 20 on the opposite sides of the door to be engaged under the tabs 16 on that side, the inherent resiliency of the pad, or the inherent tendency to flatten out, bringing the hooked portions into full engagement under the tabs as shown in Fig. 5.

After this engagement at the sides, the upholstery pad, as a whole is slid downwardly, to engage the lower strip 19 with the lower series of tabs 16, the pad being then securely held by wholly concealed fastening means along the sides and bottom. At the top the pad may be held in place by the usual moulding at the bottom of the window opening, (not shown).

If desired, the pads and hooks, which are made

of sheet steel suitable for drawing operations, or other equivalent metal deformable under pressure and staying in such deformed position, when deformed, may be securely interlocked in a manner
 5 to avoid all possibility of looseness or shifting of the pad after application as described, by applying pressure to the outside of the upholstery pad sufficient to deform the tabs and press them down toward the bottom of the depression.

10 Instead of having the hooked metal strips 19 extend substantially continuously along one side of the pad, the invention also includes the use of spaced narrow strips 19' as shown in Fig. 8, one for each tab 16, these strips being somewhat wider
 15 than the tabs to permit the slight shifting downwardly of the pad, after assembly at the sides, to engage the bottom tabs, as hereinbefore described.

By the use of the fastening means described the
 20 upholstery pads may be readily stacked without injury to the upholstery fabric since the hooked portions 20 extend substantially parallel to the pad and hence do not dig into the fabric when stacked. The fastening means is entirely hidden,
 25 and the pad is held flatly, securely and snugly against the door panel at the edges as well as in the center.

While we have herein described one specific form of the invention and a specific application,
 30 it will be understood that various modifications and adaptations thereof can be used without departing from the spirit and scope of the appended claims.

What we claim is:

35 1. In a body construction, a frame of pressed metal having integral tabs struck out from the metal adjacent the margins thereof, an upholstery pad including a backing and covering thereon, and metal clips having portions clamped over the
 40 upholstery backing and concealed as to their outer portions by the covering and having portions arranged to be hooked under the tabs.

2. In a body construction, an inner sheet metal frame panel having tabs struck therefrom adjacent its periphery projecting inwardly of the periphery, and an upholstery pad including a backing and covering therefor having metal clips
 80 secured to the edge of the backing and concealed as to their outer portions by the covering and having portions reversely bent and arranged to be hooked under the tabs.

3. In a body construction, an inner sheet metal frame panel provided with a depressed portion
 85 just inside its periphery and tabs struck out of the metal of said depressed portion extending inwardly of the body of the panel, and an upholstery pad having instrumentalities secured to its edge
 90 and formed with a hooked portion engaging under the tabs.

4. A sheet metal door panel forming the inner wall and side rails of a door, and formed adjacent its margins with a depressed portion and
 95 integral tabs formed in said depressed portion and extending inwardly of the body of the door and inwardly of its margins, said tabs forming means for securing an upholstery pad.

5. A door frame having its inner frame portion depressed adjacent its margins below the marginal
 100 portion and provided in said depressed portions with integral struck out tabs for securing an upholstery pad.

6. In a body construction, an inner sheet metal frame panel provided with a depressed portion
 105 inside its periphery, integral fastening means struck out from said frame panel, and an upholstery pad carrying at its edges fastening clips having hooked portions projecting into said depressed portions and cooperating with said integral fastening means to secure the pad to the
 110 panel.

PEARLE N. MILLER.
 GEORGE TRAUTVETTER.

45

120

50

125

55

130

60

135

65

70

75