Aug. 16, 1938. D. I. REITER 2,127,234

UPHOLSTERY PIN

Filed May 22, 1937

Fig. 2.

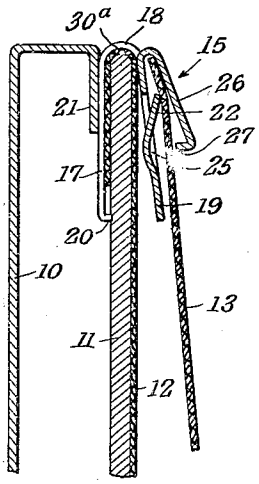


Fig. 1.

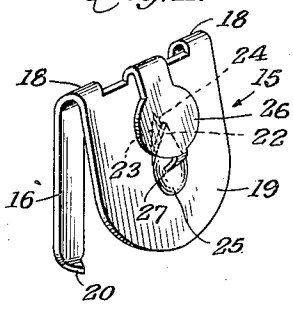


Fig. 3.

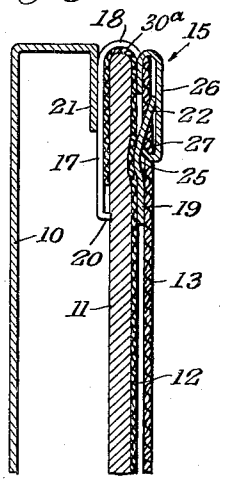


Fig. 4.

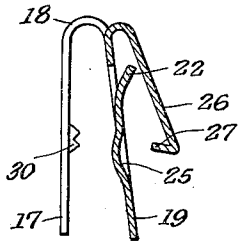


Fig. 5.

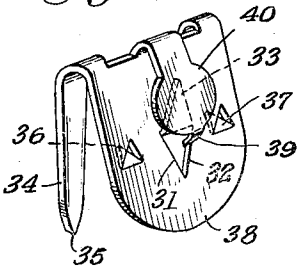
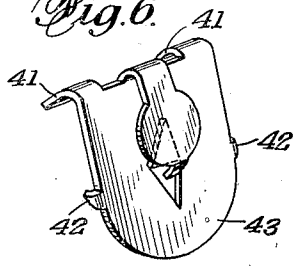


Fig. 6.



INVENTOR
Daniel I. Reiter
BY
Harry Jacobson
ATTORNEY

Patented Aug. 16, 1938 2,127,234

UNITED STATES PATENT OFFICE

2,127,234

UPHOLSTERY PIN

Daniel I. Reiter, New York, N. Y.

Application May 22, 1937, Serial No. 144,211

12 Claims. (Cl. 24—81)

This invention relates to slip-cover fasteners and particularly to that type designed to hold a fabric or the like protecting cover in place over the upholstered fabric covering of an automobile interior.

Various attempts have been made to produce efficient slip-cover fasteners, but the fasteners heretofor in general use are provided with teeth or prongs which tend to cut, pierce or otherwise damage the expensive velour or the like fabric covering of the upholstered seat, seat back, or wall, and further do not permit the slip-cover to be adjusted and stretched tightly in place.

My invention therefore contemplates the provision of a slip-cover fastener designed to be secured in place in such a manner that it will not pierce or otherwise damage or mar the underlying fabric.

My invention further contemplates the provision of a slip-cover fastener provided with means for initially holding the slip-cover during the arrangement of the cover in place, the slip-cover being readily removable from said means for the stretching thereof in its adjusted final position after it has been thus secured around its ends, the fastener when bent into its final cover-holding position further stretching the cover.

My invention further contemplates the provision of a simple and comparatively inexpensive slip-cover fastener designed to be readily secured in place and designed further to permit adjustment of the slip-cover thereon after being secured in its proper place and while the cover is being temporarily held at other points by similar fasteners.

The various objects of the invention will be clear from the description which follows and from the drawing, in which,

Fig. 1 is a perspective view of a now preferred form of my new fastener.

Fig. 2 is a vertical section of the same showing the fastener secured in place preparatory to the attachment of the slip-cover thereto.

Fig. 3 is a vertical section of the same as it appears in its operative slip-cover-holding position.

Fig. 4 is a side elevation of a modified form of the same.

Fig. 5 is a perspective view of another modified form of the same.

Fig. 6 is a similar view of another modified form of the same in which the holding legs are omitted and the fastener may be used at a window frame or similar place.

In the practical embodiment of my invention which I have shown by way of example, referring particularly to Figs. 1, 2 and 3, the seat or wall usually comprises the metal frame 10 to which is suitably secured the fibrous sheet 11, covered with a sheet of finishing material 12. Said material 12 is customarily of fine fabric such as velour or the like, and it is for the preservation of said finishing fabric from damage and soiling that the slip-covers 13 are used.

Since it is highly desirable that the slip-cover be stretched tightly across and in firmly stretched contact with the fabric 12 to prevent wrinkling of the slip-cover and ultimate disengagement thereof, I have provided a fastener designate generally by the numeral 15, (Fig. 1), which while adapted to be firmly secured in place, nevertheless permits adjustment of the slip-cover 13 to its proper taut position. My improved fastener 15 is preferably made of a single piece of sheet material, being provided with a pair of similar narrow but elongated legs 16 and 17 spaced apart and integrally joined by the bends 18 to the intermediate plate 19. The legs 16 are preferably provided at any desired point around the peripheries thereof with one or more suitable pointed members or prongs 20 which are integral with said legs and adapted to engage and grip the back of the fibrous sheet 11, when the legs 16 are forced between said fibrous sheet 11 and the portion 21 of the metallic frame 10, thus to secure the fastener in its selected position.

The plate 19 is arranged outwardly of the legs and is provided with a pointed prong as 22 raised preferably, though not necessarily, at an acute angle to the remainder of the plate and formed from the material removed from between the intersecting cuts 23 and 24 in the plate. In longitudinal alignment with said prong 22 is the depressed portion or walled recess 25 of the plate, the wall of the recess being of substantially the same width as that of the prong for the purpose later to be described in detail. Integral with the plate 19 and formed from the material removed to form the legs 16 and 17 is the outermost finger piece 26. Said finger piece member is joined integrally to the plate 19 by a suitable bend and is provided with a suitable prong such as the edge prong 27 at such point of the finger piece that the prong will engage the wall of the recess 25 when the finger piece is pressed toward the plate 19.

In use, the legs 16, 17 are inserted between the members 11 and 21 with the bends 18 thereof engaging over the sheet 12 at the point 30a where said sheet is carried over the outermost edge of the sheet 11. In most cases where the members

11 and 21 are in sufficiently closely pressed engagement, the prongs 20 on the legs 16, 17 may be omitted and dependence had upon the frictional or wedging engagement of the legs between the members 11 and 21. (See Fig. 5.) Where the prongs 20 are provided, said prongs grip the back of the sheet 11 to hold the fastener securely in place. As shown in Fig. 2, the slip-cover 13 is then carried beneath the finger piece 26 and outwardly of the plate 19 and initially hooked on to or pierced by the prong 22.

Similar fasteners 15 being secured in place at spaced points of the seat or wall in the proper position to hold the peripheral edge of the slip-cover, the initial securing operation on the slip-cover is performed at the various points where the slip-cover is to be fastened. If it is found that the slip-cover is improperly centered, or if it is not stretched with sufficient tautness, then it may be readily removed from its engagement with any one of the prongs 22 and after tightening or adjustment, it may be re-engaged at a different point thereof with said prong. This operation may be repeated as many times as may be necessary until the slip-cover has been properly adjusted, centered and stretched in the position in which it is to be secured.

Thereafter, the finger piece 26 is pressed toward the plate 19, thereby to cause the prong 27 thereof to pierce the slip-cover. Continued movement of the finger piece 26 toward the plate 19 carries the prong 27 against the wall of the recess 25 and causes the prong 27, which is preferably given an initial bias in the proper direction, to follow the wall of the depression and to bend inwardly toward the back of the finger piece 26, and at the back of the slip-cover. Substantially simultaneously, the finger piece engages the end of the prong 22 and bends said prong back toward the plate 19. Such bending of the prong 22 causes the exertion of additional tension on the slip-cover 13 and serves to further stretch the slip-cover into its proper taut position.

It will be seen from Fig. 3 that the slip-cover is thereby held by and between the prongs 22 and 27 which pierce the slip-cover at spaced points, in a manner which may be termed metallic stitching. It will further be seen that the wall of the recess 25 prevents the prong 27 from coming into contact with the fabric sheet 12, so that when the slip-cover 13 and fastener 15 are removed, the fabric 12 remains unsullied and undamaged.

As shown in Fig. 4, the prongs 20 may be replaced by suitable edge prongs as 30 extending from an edge of the legs 16 and 17, and adapted to engage the rear face of the fabric sheet 11 to anchor the fastener in place.

As shown in Fig. 5, the recess 25 may be omitted as well as the cuts 23, 24, and a triangular opening made instead in the plate 38 as by means of a pair of intersecting cuts 31, 32. The material removed from between said cuts to form the opening is bent to form the prong 33, similar to the prong 22. The legs 34 may be pointed if desired, as shown at 35, to render it easier to insert said legs between the members 11 and 21. In those cases where it is not important that the fabric sheet 12 remain unpierced, said pointed legs may be inserted through the fabric and against the front of the backing sheet 11.

In those cases also, or alternatively, suitable prongs as 36, 37 may be bent from the material of the plate 38, said prongs being preferably aligned with the legs 34 and adapted to be bent by pressure against said legs or against the sheet 11 after the prongs have passed through the sheet 12. Similarly, the prong 39 on the finger piece 40 passes through the opening between the cuts 31, 32 and engages or pierces the sheet 12. It will be understood as above mentioned that this type of fastener is intended to be used where it is immaterial whether the fabric sheet 12 is pierced or not. It will further be understood that instead of the prongs 36, 37, edge prongs may be formed on the plate 38 or the prongs may be provided at other suitable points as is for example indicated in Fig. 6 at 42.

Referring now to Fig. 6, I have there shown a type of fastener which is intended to be used at or adjacent a window where there is insufficient space to use extended legs as 16 or 34. In this form of my invention, the legs 16 are omitted and a hook portion 41 provided instead. In this form of the fastener, I have also shown an alternative arrangement of prongs, namely edge prongs as 42 provided at the periphery of the plate 43.

It will be seen that I have provided a fastener which is simple in construction and efficient in operation and to which a slip-cover may be initially secured and later adjusted before being finally secured in position; that when securing the slip-cover in position, the holding prong serves to further stretch the cover while the prong on the finger piece cooperates with the first mentioned prong to produce a metallic stitching holding the slip-cover securely in place.

While I have shown and described certain specific embodiments of my invention, I do not wish to be understood as limiting myself thereto, but intend to claim my invention as broadly as may be permitted by the state of the prior art and the scope of the appended claims.

I claim:

1. In a one-piece upholstery fastener, a portion having a bend therein adapted to be arranged over an edge portion of a backed fabric sheet, a plate extending from the bend, a bendable prong projecting from the plate and biased outwardly of the plate, said prong being arranged to initially engage and hold a slip cover, a finger piece bendably joined at one end to and arranged outwardly of the plate and spaced sufficiently therefrom to provide space for the insertion therebetween of the slip cover, and a second bendable prong on the finger piece adapted to pierce the slip cover and to cooperate with the first-mentioned prong to stitch the slip cover therebetween when the finger piece is bent toward the plate.

2. A one-piece upholstery fastener comprising a pair of spaced legs terminating in outwardly bent portions, a plate extending integrally from said portions, a prong integral with and extending outwardly of the plate and forming means for initially and removably holding a slip cover preparatory to the adjustment and stretching of said cover, a plate-like finger piece joined at one end to the plate and having its other end free, and a second prong adjacent said free end and adapted to pierce the cover and to be bent into position to cooperate with the first-mentioned prong to hold the cover securely when the finger piece is bent toward the plate.

3. A one-piece upholstery fastener comprising means for engaging a backing member to secure the fastener in position, a plate extending integrally from said means, a prong cut from the material of said plate and outstanding there-

from, said prong being arranged to initially and removably pierce a covering sheet, and a finger piece member extending bendably and integrally from that end of the plate nearest said means, said finger piece having a second prong thereon directed toward the plate and cooperating with the first-mentioned prong to hold the covering sheet when the finger piece is bent toward the plate.

4. A sheet metal upholstery fastener comprising sheet-metal means for securing the fastener in position, a sheet metal plate extending integrally from said means and adapted for arrangement on the rear face of a slip cover, a bendable prong extending forwardly from the plate and adapted to pierce the slip cover, a bendable finger piece extending forwardly of the plate in position to engage the front face of the cover and to bend the prong when pressed rearwardly toward the plate, and a cover-piercing prong on the finger piece.

5. An upholstery fastener comprising means adapted for insertion between a furniture covering sheet and the frame therefor for securing the fastener in place, a plate projecting from said means and adapted for arrangement in front of said sheet, said plate having a forwardly outstanding prong adapted to initially engage a slip cover and to temporarily hold said cover for adjustment relatively to the prong, and means for bending said prong in the adjusted position of the slip cover and for also cooperating with the prong to hold the slip cover comprising a bendable member integral with and arranged forwardly of the plate in position to engage the prong when said bendable member is bent toward the plate, and cover-piercing means on the bendable member.

6. An upholstery fastener comprising means for securing the fastener in slip cover holding position, a member extending from said securing means and adapted for arrangement at the rear surface of a slip cover, a prong on said member, bendable means cooperating with said member when bent toward said member to secure a slip cover therebetween, and a prong on the pronged means cooperating with the prong of the member to stitch the slip cover therebetween.

7. An upholstery fastener comprising means for securing the fastener in slip cover holding position, a plate extending from said securing means and adapted for arrangement at the rear face of a slip cover, a prong projecting forwardly of said plate and adapted to pierce the slip cover, said plate having a recess therein defining walls in longitudinal alignment with said prong, and a bendable member projecting forwardly from said plate and having a prong thereon adapted to engage a wall of the recess after said prong has pierced the slip cover, said prongs being bent simultaneously on the bending of said bendable member toward said plate.

8. An upholstery fastener comprising means for securing the fastener in slip cover holding position, a plate extending from said securing means, said plate having a recess therein defining walls, a prong on the plate adjacent the recess, and a bendable finger piece projecting forwardly from said plate and having a prong thereon, said prong being arranged in position to engage a wall of the recess and to be bent on the bending of the finger piece toward the plate.

9. In an upholstery fastener, a plate, a prong projecting forwardly of the plate, said plate having a recess therein defining walls in longitudinal alignment with the prong, a bendable member arranged forwardly of the plate and having a bendable prong thereon, said prong being positioned to engage a wall of the recess when the bendable member is bent toward the plate whereby both of said prongs after piercing a slip cover are bent in position to stitch the slip cover between the plate and said member.

10. In an upholstery fastener, a plate member having an opening therein, a prong outstanding therefrom and formed from the material removed to form the opening, said prong being adapted to engage and hold a tensioned slip cover, a finger piece member arranged in outward lateral spaced relation to the plate member and integral therewith at one of its ends, and a prong projecting from the finger piece member toward the plate member and arranged in position to pass through said opening when said members are pressed together.

11. A one-piece fastener of a single piece of sheet metal for use in securing an end part of a flexible member on the face of a sheet comprising a flat plate having an opening therein of less than the full length or width of the plate, a pair of transversely spaced elongated and comparatively narrow securing elements at an edge portion of the plate, a pointed part on the end of each of said elements adapted to enter said sheet and to engage the rear face thereof to secure the plate at the front face of the sheet, a bendable plate-like member of less length and width than that of said plate, said bendable member extending at one end from the same edge portion of the plate as that from which said elements extend, and being arranged between said elements in non-parallel relation to the plate, the other end of said bendable member being free and terminating in a pointed portion joined by a bend thereto and directed toward the plate and arranged to press against said plate at a point in longitudinal spaced relation to the opening of the plate and to enter said end part of the flexible member inserted between the plate and the bendable member, when the bendable member is bent toward the plate.

12. A one-piece fastener of a single piece of sheet metal for use in securing an end part of a flexible member on a sheet comprising a flat plate having an opening therein of less than the full length or width of the plate, a pair of spaced elongated and comparatively narrow securing elements at an edge portion of the plate, a pointed part on each of said elements adapted to enter said sheet to secure the plate permanently at the front face of the sheet, a bendable plate-like member of less length and width than that of said plate, said bendable member being arranged between said elements in non-parallel relation to the plate, and having a free end terminating in a pointed portion directed toward the plate and arranged to press against said plate at a point in longitudinal spaced relation to the opening of the plate and to enter said end part of the flexible member inserted between the plate and the bendable member, when the bendable member is bent toward the plate.

DANIEL I. REITER.